						-																											
																						!									•		
H0179: 1 and S0002: 1.	H0305: 2, H0306: 1, H0402	1, H0580: 1, H0179: 1,	S0052: 1, S0428: 1, S0053: 1 S0031: 1 and H0444: 1.	H0179: 1 and H0087: 1.	AR051: 76, AR054: 73,	AR050: 42	S0218: 1, H0179: 1 and	S0428: 1.	H0179: 1 and H0543: 1.	H0179: 1 and H0445: 1.	-	H0075: 1 and H0179: 1.	H0179: 2	H0179: 2	H0179: 2		H0179: 2	H0179: 2	H0179: 2	H0179; 2			H0179: 2	H0179: 2		S0114: 1 and H0179: 1.	L0774: 2, H0402: 1 and	H0179: 1.	H0179: 1 and H0264: 1.	H0179: 2	H0179: 1 and H0063: 1.	H0179: 1 and H0271: 1.	H0486: 1 and H0179: 1.
Lys-15 to Thr-26.	Gln-26 to Gln-42.			Gly-4 to Gly-11.					Ile-3 to Gly-8.	Glu-1 to Arg-11,	Pro-13 to Gly-22.	Gly-1 to Pro-9.			Ile-6 to Gln-24,	Thr-31 to Asp-52.				Gln-3 to Ser-9,	Cys-18 to Trp-27,	Pro-34 to Pro-39.		Gly-1 to Ser-9,	Ser-18 to Glu-23.	Asp-1 to Gly-7.				Lys-10 to Val-17.			
13438	13439			13440	13441				13442	13443		13444	13445	13446	13447		13448	13449	13450	13451			13452	13453		13454	13455		13456	13457	13458	13459	13460
3 - 173	148 - 300			3 - 263	192 - 410				60 - 182	380 - 529		1 - 171	142 - 294	62 - 331	99 - 254		178 - 339	2 - 316	72 - 227	252 - 386			68 - 322	1 - 258		27 - 308	84 - 212		2 - 106	1 - 114	52 - 288	1 - 168	13 - 174
3686	3687			3688	3689				3690	3691		3692	3693	3694	3695		3696	3697	3698	3699			3700	3701		3702	3703		3704	3705	3706	3707	3708
507302	524222			529168	958742				529576	919274		954173	527894	527891	523571		527889	507211	773793	527887			527895	527883		861062	954094		927590	507208	506532	529873	720588
HNEAN61	HNEAN85			HNEBI66	HNEBJ08				HNEB135	HNEBJ48		HNEBM07	HNEBY19	HNEBY26	HNEBY30		HNEBY32	HNEBY34	HNEBY44	HNEBY46			HNEBY48	HNEBY71	,	HNECD65	HNECE07		HNECE14	HNECF59	HNECF76	HNECI57	HNECK47

		·													164731, 172400, 172400, 180901,	180901, 221770,	248600, 600918, 602716								
															19q13.1										
S0114: 1 and H0179: 1.	S0052: 2, H0179: 1 and L0375: 1.	H0585: 10, H0141: 2, H0556: 1, H0656: 1 and H0179: 1.	H0179: 2	H0179: 2	H0179: 2	H0271: 2 and H0179: 1.	H0436: 2, S0114: 1 and H0179: 1	H0179: 1 and S0428: 1.	H0179: 2 and H0521: 1.	H0179: 2 and H0271: 1.	H0179: 2	H0179: 2	H0179: 3, S0114: 1 and	110001.1.	H0179: 1 and H0271: 1.			H0179: 2	H0179: 2	H0255: 1 and H0179: 1.	H0580: 1 and H0179: 1.	H0179: 3	H0421: 1 and H0179: 1.	H0265: 1 and H0179: 1.	H0421: 1 and H0179: 1.
Arg-16 to Val-24, Pro-27 to Arg-34, Gln-37 to Leu-42.		Ser-16 to Gly-22, Arg-37 to His-45, Val-56 to Arg-64.		Ala-1 to Ser-8.			Trp-37 to Glu-43.		Pro-10 to Glu-15.				Pro-6 to Met-11.		Val-21 to Pro-39, Thr-57 to Ser-64,	Pro-83 to Gln-92.				Asp-38 to Met-44.		Ser-5 to Phe-18, Asp-28 to Glu-43.		Ser-5 to Gly-19.	
13461	13462	13463	13464	13465	13466	13467	13468	13469	13470	13471	13472	13473	13474		13475			13476	13477	13478	13479	13480	13481	13482	13483
1 - 228	270 - 410	18 - 332	65 - 235	2 - 274	24 - 137	3 - 299	326 - 490	2 - 193	53 - 304	151 - 336	61 - 189	200 - 505	1 - 423		88 - 363			189 - 389	49 - 336	307 - 173	78 - 263	10 - 276	33 - 134	94 - 219	27 - 233
3709	3710	3711	3712	3713	3714	3715	3716	3717	3718	3719	3720	3721	3722		3723			3724	3725	3726	3727	3728	3729	3730	3731
932501	527100	935045	527810	861031	861068	529868	527511	958356	466977	575633	968378	527508	855430		50/305			527589	507186	789187	721895	527060	572390	967643	790570
HNECK66	HNECK67	HNECK83	HNECL71	HNECM64	HNECO69	HNECR93	HNECS77	HNECT70	HNECV31	HNECV66	HNECW09	HNECW20	HNECW35		HNECX77			HNEDD27	HNEDD80	HNEDD90	HNEDE48	HNEDE59	HNEDF71	HNEDG11	HNEDG35

								-																							
H0179; 2	H0179: 1 and H0271: 1.	H0179: 1 and H0444: 1.	H0179: 2	H0179: 2 and H0271: 1.	AR051: 13, AR054: 10,	AR050: 2	H0179: 2 and H0271: 1.		S0114: 1 and H0179: 1.	H0657: 1, H0179: 1 and	H0264: 1.	H0179: 2	H0179: 2	H0179; 2	AR050: 7, AR054: 3,	AR051: 1	H0542: 2, H0318: 1, H0179:	1 and L0527: 1.	H0402: 1 and H0179: 1.	H0179: 2	H0179: 3	H0580: 1 and H0179: 1.	H0179: 1 and S0002: 1.	H0265: 1, H0650: 1 and	H01/9: 1.		H0179: 1 and H0521: 1.	H0179: 2	H0179: 1 and S0428: 1.	L0748: 2, H0556: 1, H0457: 1, H0179: 1 and L0455: 1	H0271: 1 and H0436: 1.
Leu-13 to Gly-20.	Cys-18 to Cys-24.	•	Arg-40 to Thr-47.		His-1 to Trp-8,	Ala-31 to Leu-37,	Pro-39 to Pro-50,	Ser-54 to Ser-73.				Gly-27 to Lys-32, Ser-45 to Pro-53.	Pro-34 to Pro-45.						Gln-36 to Gly-41.	Leu-7 to Gly-12.	Arg-1 to Arg-7.					Met-1 / to 1rp-26.			Ser-34 to Gln-43.	Ser-14 to Ile-21.	Glu-6 to Gly-24, Cys-35 to His-46.
13484	13485	13486	13487	13488	13489				13490	13491		13492	13493	13494	13495				13496	13497	13498	13499	13500	13501	0000	13502	13503	13504	13505	13506	13507
163 - 339	56 - 289	436 - 573	117 - 365	1 - 153	3 - 446					84 - 203		1 - 192	57 - 233	32 - 196	764 - 925				35 - 166	1 - 126	153 - 4	1 - 147	156 - 416	1 - 189	140 005	149 - 295	1 - 225	108 - 320	403 - 531	329 - 577	203 - 472
3732	3733	3734	3735	3736	3737				3738	3739		3740	3741	3742	3743				3744	3745	3746	3747	3748	3749	2750	3/30	3751	3752	3753	3754	3755
746708	527505	697747	573138	923910	702570				527503	765880		527499	573136	527816	586485				683470	925091	954586	703032	909832	868102	577105	5/3185	781940	844318	863668	668747	667712
HNEDG56	HNEDH54	HNEDH96	HNEDI80	HNEDK04	HNEDK16				HNEDK22	HNEDK74		HNEDN42	HNED095	HNEDQ51	HNEDQ68				HNEDR48	HNEDS03	HINEDS18	HNEDS29	HNEDU01	HNEEA41	TRITEDOS	HINEEB02	HNEEB84	HNEEC81	HNEED12	HNEED48	HNFAA13

								-																				****		
H0318: 1, H0271: 1 and H0444: 1.	H0271: 2	L0746: 3, H0436: 2, L0745:	H0179: 1 and H0271: 1.	H0271: 2	H0271: 2		H0271: 2	H0271: 2	H0271: 2	H0255: 1 and H0271: 1.	H0271: 1 and S0052: 1.	S0474: 1 and H0271: 1.	H0271: 1 and H0444: 1.	H0271: 2	L0766: 3, H0271: 1, S0052:	1, L0779: 1 and L0731: 1.	H0271: 2	H0271: 2	H0179: 1, H0271: 1 and	H0486: 1 and H0271: 1	H0271: 2	H0271: 1 and S0053: 1.	H0271: 2 and L0600: 2.	H0179: 1, H0271: 1 and	H0444: 1.	L0740: 2, H0271: 1 and	H0271: 3 and H0364: 1	1102/1: 3 allu 110204: 1.	H0271: 1 and H0264: 1.	H0271: 2
Phe-11 to Gln-20.	His-1 to Gln-7.			Pro-19 to Leu-27.	Pro-4 to Arg-16,	Tyr-36 to Asn-42.	Lys-1 to Val-7.	Ser-32 to Pro-39.				Glu-2 to Pro-9.	Asn-10 to His-16.	Pro-1 to Leu-16.			Ala-6 to Lys-11.					Gly-61 to Gly-68.				His-42 to Asn-49.	T PIT-10 to Asp. 15	Glu-27 to Lys-33.		
13508	13509	13510	13511	13512	13513		13514	13515	13516	13517	13518	13519	13520	13521	13522		13523	13524	13525	13526	13527	13528	13529	13530		13531	13532	***************************************	13533	13534
100 - 288	34 - 135	374 - 739	2-136	2 - 208	2 - 175		33 - 308	96 - 218	8 - 232	100 - 360	3 - 137	271 - 546	171 - 440	2 - 121	64 - 297		3 - 185	119 - 229	2 - 193	168 - 401	166-312	7 - 294	1 - 201	315-488		232 - 426	217 - 388	200	1 - 186	119 - 244
3756	3757	3758	3759	3760	3761		3762	3763	3764	3765	3766	3767	3768	3769	3770		3771	3772	3773	3774	3775	3776	3777	3778		3779	3780	3	3781	3782
781578	530295	784714	861069	861021	530349		662053	530064	967784	861015	902669	861014	761390	585328	927836		529964	927833	955293	861005	529867	496241	960239	854017		537317	712571		787085	537341
HNFAA80	HNFAA83	HNFAD95	HNFAE07	HNFAF40	HNFAG69		HNFAH45	HNFBS51	HNFBT11	HINFBU53	HNFCI32	HNFCI41	HNFCI77	HNFCL68	HNFCS04		HNFC127	HNFCT67	HNFCW14	HNFCY33	HNFDC21	HNFDC91	HNFDJ17	HNFDK40		HNFDN04	HNFDN41		HNFDN89	HNFD081

									9:									÷												:		
H0271: 2	H0271: 1 and S0052: 1.	H0179: 1, H0271: 1 and L0667: 1.	H0271: 2	H0271: 2				H0271: 2	L0794: 2, L0805: 2, L0789:	2, H0271: 1, L0803: 1,	L0774: 1, L0776: 1, S0053: 1	and L0589: 1.		H0271: 3		AR051: 12, AR054: 1,	AR050: 1	H0580: 3, H0254: 2, H0521:	2, H0656: 1, H0457: 1,	H0271: 1 and H0488: 1.	H0271: 1 and S0052: 1.	H0179: 1 and H0271: 1.	H0271: 1, L0766: 1 and	H0522: 1.	H0271: 2	H0271: 2	H0637: 1 and H0271: 1.		S0052: 3, H0271: 1 and	H0521: 1.	H0271: 2	H0271: 1 and S0053: 1.
				Gly-1 to Val-9,	Gln-19 to Gln-28,	Leu-33 to Gly-38, $\frac{112}{112}$	HIS-40 to Arg-50.	Pro-13 to Ser-18.	Arg-54 to Pro-64.				Arg-21 to Arg-30.	Leu-13 to Gly-18,	Glu-29 to Trp-34.	Pro-1 to Ala-7,	Leu-26 to Ser-35.				Lys-19 to Tyr-29, Ser-56 to Val-67.				Asp-29 to Cys-36.	Ala-14 to Ser-29.		His-41 to Leu-51.				Ser-2 to Glu-10, Gly-12 to Gly-17.
13535	13536	13537	13538	13539				13540	13541				19331	13542		13543					13544	13545	13546		13547	13548	13549	19332	13550		13551	13552
126 - 437	2 - 265	72 - 221	93 - 278	1 - 201				1 - 93	13 - 336				581 - 441	188 - 343		190 - 516			-		227 - 469	154 - 261	242 - 346		1 - 147	19 - 108	1 - 267	911 - 759	136 - 375		91 - 243	15 - 389
3783	3784	3785	3786	3787				3788	3789				9579	3790		3791					3792	3793	3794		3795	3796	3797	9580	3798		3799	3800
575347	719215	527500	537343	537337	<del></del>			537334	583458				583459	424792		850982					971171	526641	934595		825406	518245	957396	971651	296098		537336	669916
HNFDO84	HNFDP09	HNFDR35	HNFDR83	HNFDV41				HNFED22	HNFED43					HNFEF43		HNFEF83					HNFEF95	HNFEG09	HNFEG31		HNFEH12	HNFEI12	HNFEK33		HNFEM76		HNFEM86	HNFEN20

																					9													
H0271: 2	H0271: 1 and S0428: 1.	H0271: 2	H0271: 2	H0271: 2, L0768: 1 and	L0794: 1.	H0271: 2	H0271: 1 and S0144: 1.	H0271: 2 and H0556: 1.	H0271: 1 and H0416: 1.		H0271: 2	H0271: 2	L0439: 4, H0402: 1, H0271:	1, L0438: 1 and H0444: 1.	H0271: 2 and H0486: 1.	H0271: 1 and S0428: 1.	H0271: 2	H0271: 2	H0271: 3 and L0766: 1.		H0271: 2 and L0596: 1.	H0581: 1 and H0271: 1.	H0271: 1 and S0002: 1.		H0271: 2	H0271: 2	H0271: 3	H0271: 2	H0271: 2	H0271: 2	H0271: 2	H0271: 2	H0271: 2	H0271: 2
	Gly-9 to Ser-28.	Pro-42 to Asp-47.				Gly-6 to Arg-11.		Arg-4 to Ala-14.	Asp-11 to Glu-17, $\overline{1}$	Lys-24 to Gly-32.		Lys-12 to Val-17.	Gly-7 to Glu-16,	Asp-34 to Glu-39.	Lys-14 to Asp-24.				Ala-1 to Lys-8,	Gly-32 to Gly-37.	Glu-6 to Val-14.		Glu-3 to Pro-15,	Leu-19 to Ser-26.	Asp-38 to Arg-54.					Ser-14 to Gly-21.			Ala-1 to Arg-6.	Val-31 to Tyr-66,
13553	13554	13555	13556	13557		13558	13559	13560	13561	125.00	13562	13563	13564		13565	13566	13567	13568	13569		13570	13571	13572		13573	13574	13575	13576	13577	13578	13579	13580	13581	13582
2 - 148	152 - 370	2 - 274	1 - 87	1 - 87	-	1 - 111	134 - 439	281 - 415	59 - 220	17	/0-7	1 - 192	45 - 185		10 - 174	2 - 238	29 - 202	3 - 239	118 - 315		481 - 738	20 - 343	60 - 200	- 1	137 - 397	1 - 162	69 - 236	102 - 233	41 - 169	1 - 102	3 - 242	189 - 404	2 - 187	2 - 424
3801	3802	3803	3804	3805		3806	3807	3808	3809	7010	3810	3811	3812		3813	3814	3815	3816	3817		3818	3819	3820		3821	3822	3823	3824	3825	3826	3827	3828	3829	3830
530355	787086	860920	574398	575549		575552	671263	574693	577422	6777670	2/40/8	781693	921923		574679	860311	920748	529978	740644		705856	742049	727306		860851	574618	558192	574677	574669	860904	574616	574623	574617	506711
HNFEO61	HNFER89	HNFES44	HNFEU62	HNFEV41		HNFEV66	HNFFB21	HNFFC21	HNFFD88	INTEREO1	HINFFF01	HNFFG79	HNFFH03		HNFFH04	HNFFJ48	HNFFK15	HNFFK36	HNFFK61		HNFFM25	HNFF061	HNFFO76		HNFFR05	HNFFR46	HNFFS14	HNFFS23	HNFFS46	HNFFS96	HNFFT30	HNFFT62	HNFFT71	HNFFT83

	H0271: 3	H0271: 2	H0271: 2	H0402: 1 and H0271: 1.		H0271: 2			H0271: 2	H0271: 3	H0271: 1, H0416: 1, L0758:	1 and H0543: 1.	AR050: 34, AR051: 30,	AR054: 28	H0179: 1, H0271: 1, S0428:	and H0543: 1.	H0271: 1 and H0416: 1.	H0179: 1, H0271: 1, H0264:	1 and S0052: 1.		H0271: 2	H0271: 2 and L0749: 1.	H0271: 2, H0265: 1 and	H0556: 1,	H0486: 1 and H0271: 1.	H0179: 1 and H0271: 1.	H0271: 2 and L0581: 1.	H0271: 2, H0581: 1 and	H0271: 1 and H0187: 1	H0179: 1 and H0271: 1	H0271: 2, L0761: 1, L0752:	1, L0755: 1 and L0596: 1.	H0271: 2
Gly-68 to Leu-73.	1	Met-11 to Val-16.	H		5.		Ala-14 to Pro-19,	Val-30 to Ser-35.	H	H	Lys-1 to Glu-7,	<u> </u>				1	Val-3 to Ser-13.			Ala-67 to Asn-72.	H	Gly-40 to Glu-45.	,	Asn-34 to Ser-41. H0	H	Glu-8 to Gly-17.	H	H	H		Gln-6 to Leu-23. H	1	Arg-29 to Arg-34.
	13583	13584	13585	13586		13587			13588	13589	13590		13591				13592	13593			13594	13595	13596		13597	13598	13599	13600	13601	13602	13603		13604
	112 - 264	200 - 322	94 - 267	190 - 321		195 - 461			1 - 219	75 - 245	256 - 534		59 - 235				2 - 100	23 - 361			37 - 189	2 - 241	249 - 434		96 - 350	1 - 129	3 - 140	3 - 140	178 - 324	230 - 379	2 - 481		3 - 299
	3831	3832	3833	3834		3835			3836	3837	3838		3839				3840	3841			3842	3843	3844		3845	3846	3847	3848	3849	3850	3851		3852
	932364	574153	574143	574217		574218			574152	526845	913701		268098				577342	668098			967538	006098	782183		851981	781720	684992	526843	524419	954601	921431		2009707
	HNFFV05	HNFFV66	HNFFV73	HNFFX21		HNFFX55			HNFFX79	HNFFZ53	HNFFZ89		HNFFZ91				HNFGB37	HNFGC17			HNFGC46	HNFGC53	HNFGC57	3	HNFGC64	HNFGE16	HNFGE36	HNFGF83	HNFGH24	HNFGH71	HNFGI01		HNFGI49

HNFGI84	783204	3853	2 - 130	13605		H0271: 2		
HNFG193	526534	3854	2 - 199	13606	Glu-3 to Cys-21.	H0271: 2		
HNFGK28	574599	3855	158 - 334	13607	Glu-1 to Asn-10, Asn-29 to Lys-34, Asn-43 to Gly-48.	H0271: 2		
HNFGK29	574593	3856	41 - 235	13608		H0271: 2		
HNFGK39	574592	3857	1 - 237	13609	Ser-1 to Phe-6,	H0271: 2		
					Pro-22 to Arg-27,			
					Glu-31 to Glu-36, Ser-42 to Arg-48.			
HNFGL31	420241	3858	23 - 445	13610		H0402: 1 and H0271: 1.		
HNFGL94	709264	3859	1 - 150	13611	His-6 to Arg-12.	H0271: 2		
HNFGM40	524398	3860	127 - 357	13612	Pro-5 to Cys-11, Ser-25 to Ala-31, Pro-39 to Lys-44.	H0271; 2		
HNFGM61	750800	3861	3-170	13613	Ala-2 to Trn-7	H0271.3	201 205	104770
		9	)		Thr-10 to Len-26		C2h-12h1	1047/0, 107300,
								131210 135940
			-					136132 1450
								146790, 150292,
								152445, 1524
								159001, 1736
				_				174000, 1797
				. —				182860, 182860,
							-	182860, 1913
								208250, 2308
								[230800, 2337
		-		_				266200, 6008
		<u>-</u>						600995, 6011
							- <del></del>	601412, 601518,
TRIECTATO	277000	0,00						601652, 602491
HINFGM/0	200806	3862	1 - 507	13614		AR089: 8, AR061: 6		
			-			L0761: 3, H0457: 2, L0769:		
						2, L0800: 2, L0794: 2,		
			•			H0580: 1, H0271: 1, L0796:		
					Thr-71 to Arg-76,	1, L0803: 1, L0789: 1,		

															229600, 264300,	600542, 602014, 602088	109560, 205900, 600652, 600757							
															9q22		19q13							
L0792: 1, L0777: 1 and		H0271: 3, L0766: 1, S0052: 1 and L0591: 1.	H0271: 2	H0271: 1 and H0542: 1.	H0271: 1 and H0264: 1.	L0766: 3, H0271: 2, H0306: 1 and H0402: 1.	H0580: 1 and H0271: 1.	H0271: 2	H0271: 2			-	H0416: 2, L0439: 2, H0271:	1 and L0776: 1.	H0271: 4, H0179: 1 and	L0748: 1.	H0271: 1 and S0052: 1.	AR089: 11, AR061: 8 H0271: 2	H0271: 2 and H0444: 1.	H0271: 2	H0271: 2	H0271: 2	H0271: 2	H0271: 2
Ser-81 to Glu-94, Thr-101 to Phe-108	Arg-119 to His-126, Gln-139 to Gly-148, Ser-151 to Ser-159.	Thr-12 to His-29.		Thr-42 to Pro-49.			Thr-22 to Phe-28.	Leu-1 to Ile-8.	Asn-3 to Ser-9,	Ala-21 to Trp-29,	Ser-51 to Trp-56,	Arg-63 to Arg-68, IIe-89 to Pro-94.	Gln-10 to Tyr-17,	Arg-19 to Gln-30, Lys-48 to Ala-54.						Leu-1 to Ser-8.	Ser-6 to Leu-12.		Arg-1 to Ser-7, Glu-9 to Asn-16.	
		13615	13616	13617	13618	13619	13620	13621	13622				13623		13624		13625	13626	13627	13628	13629	13630	13631	13632
		67 - 327	56 - 334	302 - 517	42 - 125	84 - 230	213 - 383	180 - 314	3 - 305				430 - 693		344 - 721		317 - 493	1 - 360	327 - 482	313 - 191	3 - 323		170 - 322	23 - 205
		3863	3864	3865	3866	3867	3868	3869	3870				3871		3872		3873	3874	3875	3876	3877	3878	3879	3880
		275567	574588	953915	574643	932413	750597	574583	574587				915309		795918		924695	967520	970875	666827	699518	574146	574148	574684
		HNFGN36	HNFGN60	HNFGP07	HNFGP31	HNFGP64	HNFGQ23	HNFGQ58	HNFGU56				HNFGW96		HNFGX55		HNFGZ03	HNFHA11	HNFHD40	HNFHF18	HNFHF32	HNFHF33	HNFHF53	HNFHG35

				113900, 126340,	126391, 130410,	134790, 138570,	160900, 173850,	191044, 258501,	600040, 600138	602225, 602225		109560, 205900,	600652, 600757									,											
				19q13.3-q13.4								19q13	·											_									
H0271: 2	H0271: 1 and H0090: 1.	H0271: 1 and H0090: 1.	H0271: 2	H0179: 1 and H0271: 1.							H0271: 3	H0271: 3		H0179: 1 and H0271: 1.	H0271: 3		ABOC1 1 ABOOD 0	AKU01: 1, AKU89: U   H0771: 7	1102/1.2	S0428: 2, H0271: 1, L0770: 1, L0666: 1 and S0053: 1.	H0271: 1. S0002: 1 and	S0052: 1.	L0771: 2, H0556: 1, H0657:	1, S0116: 1, H0402: 1,	H0580: 1, S0278: 1, H0179:	1, H0271: 1, S0002: 1,	L0752: 1 and S0196: 1.	H0556: 1 and H0271: 1.	H0585: 1 and H0271: 1.	H0271: 2	H0271: 2 and S0428: 1.	H0271: 1, H0416: 1 and H0521: 1.	H0271: 2 and H0090: 1.
Arg-2 to Asn-14.											Asn-4 to Gly-17.	His-10 to Ser-24,	Gln-32 to Phe-55.	Ser-8 to Ile-16.	His-1 to Asn-8,	Ser-15 to Gln-22,	D-0 70 to I 47	FIO-30 to Lys-43.		Lys-1 to Gly-23.	Pro-6 to Glv-11.	· .									Gln-1 to Trp-8.	Arg-60 to Lys-65.	Pro-34 to Ser-44.
13633	13634	13635	13636	13637							13638	13639		13640	13641		12647	15047		13643	13644		13645					13646	13647	13648	13649	13650	13651
84 - 182	34 - 213	180 - 362	38 - 181	36 - 128							33 - 203	149 - 352		11 - 208	3 - 446		165 117	774 - 601		114 - 311	3-131		40 - 360					3 - 134	7 - 87	165 - 272	173 - 334	41 - 322	111 - 323
3881	3882	3883	3884	3885							3886	3887		3888	3889		3000	2020	, 555	3891	3892		3893					3894	3895	3896	3897	3898	3899
808896	574697	574703	523646	521932							523569	964802		953538	860844		576196	001076		577324	657247		916624					674349	662643	860887	938114	921950	765827
HNFHH12	HNFHH31	HNFHH33	HNFHH83	HNFHH88							HNFHI17	HNFHJ10		HNFHK07	HNFHK46		LINEUV 77	//आग.गुन्ता	To Assault Car	HNFHK85	HNFHM09		HNFHM47					HNFHM58	HNFHM60	HNFHN03	HNFHQ01	HNFHQ23	HNFHQ32

																				_											
H0271: 2	H0271: 3 and H0179: 1.	H0271: 1 and H0416: 1.	H0271: 1 and H0416: 1.	H0271: 2	L0766: 2, H0341: 1 and	H0271: 1.	H0271: 2	H0271: 2	AR061: 32, AR089: 21	H0271: 2		H0271: 1, H0063: 1 and	L0750: 1.	H0486: 1 and H0271: 1.		H0255: 1, H0271: 1, S0052:	1 and S0053: 1.		H0271: 1, L0773: 1, L0363:	1, S0428: 1, L0748: 1 and	L0749: 1.	H0457: 3, H0250: 1, H0179: 1, H0271: 1 and S0053: 1	H0635: 1 and H0271: 1.	H0457: 1, H0179: 1, H0271:	1 and H0416: 1.	H0179: 2 and H0416: 1.	H0416: 1 and S0052: 1.	H0271: 1 and H0416: 1.		H0416: 1 and S0144: 1.	H0416: 2
Thr-59 to Arg-73.	Leu-10 to Glu-19.	Asp-13 to Pro-27.	His-6 to Val-11.		Lys-28 to Glu-36,	Lys-52 to Lys-57.		Ser-2 to Gly-11.	Leu-9 to Met-15,	Thr-25 to Cys-37,	Glu-40 to Gly-45, Leu-109 to His-115.	Pro-25 to Gln-33.		Met-3 to Lys-15,	Gly-39 to His-45.	Gly-1 to Asn-6,	Met-17 to Phe-23,	Thr-36 to Thr-52.	Pro-5 to Asn-14,	Glu-20 to Thr-30.		Gly-2 to Gly-8.	Glu-16 to Trp-34.	Thr-10 to Thr-15.			Phe-1 to Asn-12.	Pro-1 to Gly-11,	Glu-19 to Ala-27, Gln-49 to Arg-63.	Arg-18 to Ser-25.	Cys-23 to Ala-29, Asn-33 to Leu-38.
13652	13653	13654	13655	13656	13657		13658	13659	13660			13661		13662		13663			13664			13665	13666	13667		13668	13669	13670		13671	13672
1 - 240	63 - 344	171 - 383	1 - 195	310 - 471	171 - 1		164 - 376	59 - 400	2 - 448			3-314		115 - 315		2 - 196			335 - 589			84 - 293	2 - 583	2 - 223		230 - 319	125 - 33	86 - 352		226 - 363	2 - 166
3900	3901	3902	3903	3904	3905		3906	3907	3908			3909		3910		3911			3912			3913	3914	3915		3916	3917	3918		3919	3920
576147	586494	725666	576118	512927	683506		506309	766220	939763			577110		757261		577329			934305			716852	628098	861010		523438	577326	577442		707264	576032
HNFHQ67	HNFHR70	HNFHS84	HNFHS85	HNFHU20	HNFHU27		HNFHU85	HNFHV81	HNFHW14			HNFHW40		HNFHW70		HNFHW81			HNFHX24			HNFHX44	HNFHY29	HNFIA33		HNFIB47	HNFIB67	HNFIC22		HNFIC43	HNFIE18

H0581: 1 and H0416: 1.	H0416: 1 and H0422: 1.	H0416: 1 and H0445: 1.	H0416: 1 and S0052: 1.	H0416: 2	H0416: 2	H0416; 2	H0416; 1 and H0488; 1.	,			H0271: 1 and H0416: 1.	110/416. 2	110410; 2			H0305: 2, H0271: 1 and	H0416: 1.	H0402: 1 and H0416: 1.		H0271: 1 H0416: 1 S0052.	1 and S0053 · 1				H0416: 1 and S0053: 1.				H0271: 1 and H0416: 1.
Gly-50 to Glu-61, Pro-63 to Gln-79, Arg-98 to Ser-107, Pro-126 to Arg-137.						Arg-47 to Lys-60, Arg-67 to Trn-73.	Pro-31 to Arg-36.	Gln-51 to Thr-78,	Lys-95 to 1 nr-100.		Lys-1 to Cys-6, Ser-14 to Ser-19	Dr. 10 to Clv. 22	FIG-18 to Gly-23,	1 IIC-33 to Ala-39, Dro 64 to Tru 70	r10-04 to 11p-79.	Pro-19 to Pro-30,	Pro-46 to Ser-55.	Pro-11 to Val-35,	Gln-44 to Leu-52,	I vs. 3 to Trn. 10	Lys-12 to Phe-17	Ser-32 to Ser-39.	Cw 64 to Glu 71	Ala-73 to Asp-78.	Glu-8 to Ser-16,	Ser-41 to Tm-46.	Gly-50 to Gly-55,	Leu-72 to Arg-80.	Ser-7 to Trp-22, Asn-30 to Arg-39,
. 13673	13674	13675	13676	13677	13678	13679	13680	19333	10001	19334	13681	12600	70001			13683		13684		13685					13686				13687
2 - 478	264 - 109	240 - 476	3 - 194	90 - 236	94 - 330	102 - 434	272 - 111	590 - 925	100	327 - 587	160 - 333	102 442	103 - 443			3 - 326		1 - 318		74 - 373					3-332				1 - 210
3921	3922	3923	3924	3925	3926	3927	3928	9581	0.50	9582	3929	3030	0666			3931		3932		3033					3934				3935
918389	576143	919275	921951	576151	506258	657201	661500	698098	2000	964390	702415	740377	7/504/			574569		779925		573095					724374				921037
HNFIG07	HNFIH79	HNFIJ46	HNFIK03	HNFIK37	HNFIK44	HNFIM13	HNFIM16				HNFIN33	HNIFINIKO	CONTLINIT			HNFIN67		HNFIN83		HNFIO27					HNFIO50				HNFIO82

	H0656: 1 and H0416: 1.					H0069: 1 and H0416: 1.				H0271: 1, H0416: 1 and	H0488: 1.	H0271: 1 and H0416: 1.		H0416; 2							H0370: 1, H0416: 1 and	H0436: 1.	H0271: 1 and H0416: 1.	H0416: 2	H0416: 1 and H0436: 1.	H0556: 1 and H0416: 1.	H0271: 1 and H0416: 1.	H0271: 1 and H0416: 1.	H0416: 1 and S0002: 1.	H0416: 1, H0063: 1 and	L0803: 1.	H0271: 1 and H0416: 1.	H0271: 1 and H0416: 1.
Pro-41 to Glu-46.	Arg-1 to Trp-17,	Ser-50 to Ser-56,	Ser-74 to Ala-93,	Gly-105 to Ser-116,	Thr-177 to Leu-183.	Cys-6 to Thr-15,	Asn-29 to Arg-34,	Ala-49 to Ser-54,	Pro-81 to Gly-86.	Pro-6 to Arg-17,	Pro-62 to Gln-74.	Glu-1 to Phe-13,	Ser-17 to Trp-39.	Gln-1 to Ser-11,	Cys-20 to Pro-26,	Ala-30 to Arg-35,	Pro-49 to Gly-57,	Ser-72 to Cys-78,	Pro-80 to Asp-86,	Arg-96 to His-102.	Arg-55 to Gln-61.					Pro-12 to Ala-27.	Ala-11 to Gly-21, Pro-41 to Gly-51.		Phe-19 to Lys-27.			Asp-32 to Arg-48, Tyr-69 to Asn-74.	Asn-46 to Ala-61.
	13688					13689				13690		13691		13692							13693		13694	13695	13696	13697	13698	13699	13700	13701		13702	13703
	369 - 1067					1 - 423				183 - 440		2 - 136		3-311							161 - 472		3 - 194	146 - 376	1 - 90	100 - 321	2 - 166	192 - 392	267 - 416	171 - 335		3 - 242	172 - 354
	3936					3937				3938		3939		3940							3941		3942	3943	3944	3945	3946	3947	3948	3949		3950	3951
	965283					760366				768043		765566		928109							848254		781175	725648	697961	953268	967558	8/11/19	733363	709265		764409	740598
	HNFIP50					HNFIP71				HNFIQ17		HNFIQ74		HNFIR02							HNFIR32		HNFIR86	HNFIS51	HNFIT31	HNFIU07	HNFIU14	HNFIU24	HNFIU56	HNFIV38		HNFIV73	HNFIW62

													· -																	
									-												_									
H0271: 1 and H0416: 1.	H0179: 2 and H0271: 2.		H0271: 3	H0271: 1 and H0264: 1.	H0556: 1, H0271: 1 and	H0543: 1.	H0271: 2	H0271: 2		H0271: 1, H0063: 1 and	L0439: 1.	,				H0271: 1 and H0522: 1.	S0053: 2, S0114: 1, S0116:	1, H0580: 1, H0179: 1,	H0271: 1, H0090: 1, H0264:	1, L0805: 1, L0527: 1 and	L0367: 1.	H0402: 1 and S0052: 1.	80052: 2	S0116: 2, L0667: 1, L0803:	1, S0052: 1, L0748: 1 and	L0749: 1.	S0052: 1 and S0216: 1.	S0052: 2	S0052: 2	S0052: 2
	Arg-9 to Leu-15,	Cys-36 to Thr-43, Cys-102 to Trp-110, Lys-123 to Glu-128, Met-151 to Gln-157.	Asn-1 to Asp-7.		Leu-39 to Gly-44.			Asn-5 to Asp-12,	Leu-15 to Trp-22.	Asp-1 to Ser-18,	Ser-24 to Tyr-31,	Glu-36 to Asp-41,	Ile-49 to Leu-57,	Glu-98 to Glu-103,	Gln-118 to His-135, Gly-140 to Ala-146.	Arg-53 to Arg-60.	Arg-2 to Thr-7.	:						Gly-1 to Ala-11.			Lys-11 to Thr-24.	Gln-30 to Asp-35.	Pro-11 to Arg-21, His-43 to Lys-53.	
13704	13705		13706	13707	13708		13709	13710		13711						13712	13713					13714	13715	13716			13717	13718	13719	13720
3 - 188	24 - 494		3 - 125	1 - 201	219 - 392		1 - 243	5 - 181		3 - 590						263 - 472	006 - 9/9					19 - 123	1 - 225	5 - 295			3 - 167	152 - 271	197 - 367	2 - 169
3952	3953		3954	3955	3956		3957	3958		3959						3960	3961					3962	3963	3964		-	3965	3966	3967	3968
720315	941525		740362	723390	752489		574145	702411		860847						738593	956187					724666	527977	526940			968271	573087	676296	558467
HNFIZ47	HNFJA29		HNFJA60	HNFJA78	HNFJB80		HINFJE30	HNFJG33		HNFJG44						HNFJH59	HNFJH70					HNGAC50	HNGAD53	HNGAF45			HNGAH10	HNGAH27	HNGAI23	HNGAI35

S0052: 2	S0052: 2	H0090: 1 and S0052: 1.	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2		S0052: 2	S0278: 1 and S0052: 1.	S0052: 1 and S0053: 1.	S0052: 2		S0144: 1 and S0052: 1.	S0052: 2	S0052: 2	S0052: 1 and S0216: 1.	S0052: 2	S0052: 1 and S0053: 1.		S0052: 2	S0052: 2	80052: 2				S0052: 3	80052: 2	S0052: 2	S0052: 2
Arg-14 to Lys-23, Phe-37 to Thr-45.		Gln-1 to Lys-8, Pro-33 to Ser-58.	Arg-4 to Ile-11.	Ser-2 to Phe-11.	Gly-1 to Thr-11,	Gly-55 to Asn-60.	Thr-22 to IIe-29.	Ser-26 to Phe-32,	Val-34 to Arg-42.		Pro-80 to Ser-88.	Ala-25 to Gly-33.	Asp-7 to Val-15,	Arg-18 to Glu-26.	Pro-3 to Gln-8.	Arg-46 to Arg-54.				Cys-5 to Ser-11,	Pro-37 to Gly-42.		Thr-29 to His-34.	Asn-1 to Cys-6,	Glu-16 to Ser-25,	Leu-41 to Lys-49,	Val-70 to Gln-79.			Gly-1 to Glu-7.	Ser-1 to Asn-6, Arg-11 to Thr-23.
13721	13722	13723	13724	13725	13726		13727	13728		13729	13730	13731	13732		13733	13734	13735	13736	13737	13738		13739	13740	13741				13742	13743	13744	13745
54 - 230	2 - 214	3 - 248	3 - 344	102 - 233	180 - 1		80 - 256	3 - 212		2 - 115	127 - 444	69 - 170	127 - 333		2 - 166	3 - 164	3 - 290	21 - 218	3 - 89	1 - 249		268 - 444	103 - 285	15 - 257				117 - 383	3 - 107	217 - 453	84 - 284
3969	3970	3971	3972	3973	3974		3975	3976		3977	3978	3979	3980		3981	3982	3983	3984	3985	3986		3987	3988	3989		•		3990	3991	3992	3993
860751	577407	660682	0///098	531719	660825		574666	953889		685436	577412	660305	666852		916323	574647	574470	773208	860839	925692		506589	574671	573092				574661	574651	860753	574645
HNGAJ10	HNGAJ82	HNGAK12	HNGAK70	HNGAL51	HNGAL84		HNGAL88	HNGAL92		HNGAN28	HNGAN78	HNGAO40	HNGAP18		HNGAP59	HNGAQ54	HNGAR83	HNGAS51	HNGAU59	HNGAU65		HNGAV04	HNGAV25	HNGAV53				HNGAV79	HNGAV84	HNGAV88	HNGAW25

									-																				
S0052: 2	H0271: 1 and S0052: 1.	H0402: 1, L0365: 1 and S0052: 1.	S0052: 2, L0742: 1 and L0748: 1.	AR050: 7, AR054: 3.	AR051: 1	S0052: 4	S0052: 2	S0052: 2 and S0216: 1.		S0052: 2	S0052: 2		S0052: 1 and S0053: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2 and S0428: 1.		S0052: 2	S0052: 2	S0052: 3	80052: 2	H0250: 1, S0052: 1, L0754:	S0052: 2	S0052: 3 and S0426: 1.
		Gly-41 to Arg-46, Pro-59 to Pro-65.		Gly-26 to Thr-36,	His-88 to Lys-103.		Pro-6 to Lys-13.	Ser-15 to Lys-20,	Ala-28 to Lys-33.		Glu-2 to Asn-17,	Gln-31 to Ala-36.									Glu-1 to Gln-7,	Leu-13 to Gln-20, Lys-32 to Gly-39.	Lys-1 to Lys-11.		Arg-8 to Leu-30, Ala-32 to Leu-37.				Gly-1 to Asn-7,
13746	13747	13748	13749	13750			13751	13752		13753	13754		13755	13756	13757	13758	13759	13760	13761	13762	13763		13764	13765	13766	13767	13768	13769	13770
2 - 229	22 - 258	1 - 216	2 - 271	907 - 1395			227 - 373	99 - 371		1 - 132	57 - 218		1 - 219	138 - 28	115 - 243	1 - 165	10 - 114	2 - 442	86 - 343	2 - 127	373 - 576		1 - 180	3 - 122	216 - 437	227 - 373	2 - 208	1 - 213	1 - 75
3994	3995	3996	3997	3998			3999	4000		4001	4002		4003	4004	4005	4006	4007	4008	4009	4010	4011		4012	4013	4014	4015	4016	4017	4018
711454	507313	715380	030986	868082			684761	571331		574475	682098		577364	574469	277361	968246	574403	781978	574409	785983	948741		573072	574474	526808	932408	671258	421816	526806
HNGAW40	HNGAX82	HNGAZ49	HNGBB06	HNGBC50			HNGBE26	HNGBF41		HNGBF80	HNGBG20		HNGBG50	HNGBH04	HNGBH77	HNGBI10	HNGB135	HNGBI70	HNGBI88	HNGBI95	HNGBJ40		HNGBJ84	HNGB196	HNGBN36	HNGB034	HNGBP21	HNGBP28	HNGBP35

																							_							
	S0052: 1 and S0216: 1.	80052: 2	S0052: 2	80052: 2	80052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2 and S0428: 1.	S0052: 2	S0052: 2 and L0800: 1.	S0052: 2	S0052: 2 and S0216: 1.	S0052: 2		S0052: 1 and S0053: 1.	S0052: 1 and S0428: 1.		S0052: 1 and S0216: 1.		S0052: 2	S0052: 2	S0052: 2	S0052: 2	H0063: 1, S0052: 1, L0748:	1, L0745: 1 and L0749: 1.	S0052: 1 and S0428: 1.
Ser-15 to Phe-20.	Val-1 to Tyr-12.		Ser-44 to Arg-52.		Ala-1 to Arg-17.	His-12 to Thr-20, le-34 to Tyr-39.			Lys-9 to Ser-18.		Gln-9 to Lys-14.		Gln-24 to Glu-32, Ser-41 to Trp-50.				Arg-4 to Arg-10,	Arg-27 to Pro-44.	Gln-18 to Asp-24.	Trp-11 to Leu-17,	Pro-20 to Pro-28, Ala-32 to Glv-48	Cys-16 to Arg-28,	Cys-30 to Asn-40.			His-1 to Asn-7.		Leu-1 to Asn-6,	Ser-23 to Glu-28, Ser-36 to Glu-44	Thr-37 to Pro-44.
	13771	13772	13773	13774	13775	13776	13777	13778	13779	13780	13781	13782	13783	13784	13785	13786	13787	8	13788	13789		13790		13791	13792	13793	13794	13795		13796
	227 - 526	83 - 253	86 - 247	153 - 281	200 - 337	169 - 285	71 - 151	2 - 148	3 - 131	1 - 108	220 - 318	292 - 450	21 - 176	143 - 256	2 - 151	2 - 205	4 - 219		158 - 289	1 - 144		22 - 177		2 - 154	2 - 100	3 - 113	236 - 403	183 - 335		14 - 214
	4019	4020	4021	4022	4023	4024	4025	4026	4027	4028	4029	4030	4031	4032	4033	4034	4035		4036	4037		4038		4039	4040	4041	4042	4043		4044
	859846	573047	575561	574400	577325	579064	574467	574468	574466	574472	667293	575717	812895	573069	574464	574465	574461		674670	926947		959963		970738	527972	574397	868075	932404		920722
	HNGBQ20	HNGBQ75	HNGBS88	HNGBT44	HNGBT58	HNGBT72	HNGBU15	HNGBV67	HNGBW63	HNGBX64	HNGBZ16	HNGBZ17	HNGBZ20	HNGBZ55	HNGBZ92	HNGCA47	HNGCA61		HNGCB44	HNGCC47		HNGCD08		HNGCE85	HNGCF09	HNGCF28	HNGCG83	HNGCH05		HNGCI02

S0052: 1 and S0053: 1.	S0052: 2	S0052: 2		S0052: 2	S0052: 1 and S0053: 1.	S0052: 2	S0052: 2	S0052: 2 and L0758: 1.		S0052: 2	S0052-1 and S0053-1	S0052: 2	80052: 2	S0052: 1 and S0428: 1	S0052: 2	\$0052: 2	\$0052: 2		S0052: 2 and S0428: 1.	L0766: 1, S0052: 1 and H0445: 1.	S0052: 2		S0052: 2	S0052: 2	S0052: 1 and S0428: 1.		S0052: 1 and S0428: 1.	S0052: 2
Phe-20 to Leu-26.	Leu-1 to Ser-7.	Gly-18 to Ala-23, Pro-31 to Leu-41	Pro-57 to Glu-67.	Thr-68 to Thr-81.	Pro-21 to Ser-31.	Asn-1 to Thr-6.		Ser-6 to Pro-12,	Ser-22 to Lys-30.	Phe-1 to Arg-11,	Glu-10 to Aro-15	Phe-16 to Ser-39.	Tyr-2 to Ser-8.		Gly-26 to Pro-32.		Val-1 to Glu-10.	Pro-38 to Trp-43.	Gln-19 to Pro-25.	Lys-7 to Gln-16.	Lys-1 to Ser-14,	Lys-38 to Tyr-43.	Arg-1 to Gly-7, Val-9 to Gly-17.	Lys-55 to Glu-63.	Lys-19 to Gly-28,	Glu-37 to Gly-57, Ser-81 to His-99.		Lys-17 to Lys-23, Glu-40 to Trp-46.
13797	13798	13799	ļ	13800	13801	13802	13803	13804		13805	13806	13807	13808	13809	13810	13811	13812		13813	13814	13815		13816	13817	13818		13819	13820
2 - 223		61 - 270		3 - 278	78 - 206	38 - 142	151 - 276	154 - 408		3 - 167	2 - 139	101 - 409	22 - 255	152 - 3	1 - 258	67 - 138	3 - 155		115 - 321	236 - 346	134 - 307		3 - 113	3 - 287	81 - 428		36 - 143	1 - 258
4045	4046	4047		4048	4049	4050	4051	4052		4053	4054	4055	4056	4057	4058	4059	4060		4061	4062	4063		4064	4065	4066		4067	4068
967513	526807	825377		574456	706561	796479	574458	571332		574453	932409	708694	573055	779203	869807	574339	574340		574463	577253	574344		574338	953900	952203		806055	574392
HNGCI11	HNGCI17	HNGCI53		HNGCI69	HNGCK34	HNGCK82	HNGCK93	HNGCL31		HNGCL55	HNGCM05	HNGCO37	HNGCO45	HNGCO86	HNGCQ37	HNGCU24	HNGCU70		HNGCW38	HNGCW81	HNGCW82		HNGCW83	HNGCX07	HNGCY37		HNGCY41	HNGCY43

	T	$\neg$																						
								-																
																	<u> </u>							
L0766: 3, S0052: 2, L0598: 1, L0659: 1 and L0759: 1.	S0052: 2	80052: 2	S0052: 2	S0052: 1 and S0428: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2		H0580: 1 and S0052: 1.	S0052: 2	S0052: 2	S0052: 2	\$0050.7	S0052: 2 S0052: 2	H0556: 1, H0650: 1, H0250:	S0052. 2 and S0420. 1	S0052. 2 and 50720. 1.	S0052: 2	50052.2	7 .7000	S0052: 2	S0052: 2
Lys-8 to Gly-18, Ser-31 to Asp-50, Pro-55 to Gly-60	His-4 to Glu-10, 1-vs-31 to Ala-37	Ser-1 to Arg-20, Pro-37 to Phe-38	Pro-1 to Thr-10,	His-48 to Thr-53, Pro-55 to Gln-61		Leu-16 to Asn-22.			Arg-5 to Gly-10,	Val-17 to Trp-29, Arg-31 to Val-36.		Gly-16 to Pro-22.	Arg-35 to Pro-40.	Thr-1 to Phe-8,	Cys 12 to Out-17.		Gln-26 to Trp-41.	Cve-48 to Acn-58	His-1 to Glv-16	Ser-11 to Asn-21, Dro-23 to Met 32	Ser-1 to Len-7	Ser-26 to Tyr-35.		
13821	13822	13823	13824	13825	13826	13827	13828	13829	13830		13831	13832	13833	13834	13835	13836	13837	13838	13839	13840	13841		13842	13843
112 - 297	34 - 240	1 - 156	18 - 260	96 - 296	81 - 260	94 - 273	9 - 164	264 - 464	2 - 133		125 - 244	3 - 161	135 - 269	59 - 259	118 - 264	70 - 183	3 - 242	292 - 22	3-365	223 - 387	61 - 369		1 - 66	46 - 108
4069	4070	4071	4072	4073	4074	4075	4076	4077	4078		4079	4080	4081	4082	4083	4084	4085	4086	4087	4088	4089		4090	4091
626967	660916	574454	574452	784836	526852	573021	709270	764596	953858		794124	723368	766217	577237	573022	917254	914629	573060	860684	574559	935842		574451	927582
HNGCY59	HNGCZ13	HNGDA09	HNGDA56	HNGDB25	HNGDB65	HNGDD30	HNGDD39	HNGDD73	HNGDE07		HNGDE31	HNGDF48	HNGDF72	HNGDG86	HNGDH09	HNGDH37	HNGDH52	96HQDNH	HNGDK17	HNGDK41	HNGDL32		HNGDL72	HNGDL93

H0416: 1 and S0052: 1.	S0052: 2	S0052: 2	S0052: 2 and L0666: 1.	S0052: 2	80052: 2	S0052: 2	S0052: 2	80052: 2	S0052: 2		S0052: 2			S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2				S0052: 5	S0052: 1 and S0428: 1.	0 01000	S0052: 2				S0052: 1 and S0053: 1.		S0052: 2	H0341: 1 and S0052: 1.
Gly-23 to Pro-31, His-40 to Met-55.		Ala-1 to Tyr-7, Pro-17 to Asn-25.		Pro-16 to Gln-22.	Met-35 to His-42.				Gly-2 to Phe-10,	Pro-29 to Ser-34.	Glu-11 to Ala-16,	Pro-34 to Ser-41,	Leu-74 to Thr-80.	Ser-2 to Ser-9, Thr-26 to Cys-36.			Asn-8 to Met-14.	His-1 to Pro-8,	Glu-16 to Pro-42,	Phe-63 to Lys-76,	Pro-78 to Asp-87.	Gln-19 to Gly-24.	Arg-23 to Tyr-29,	GIY-50 10 GIY-45.	His-1 to His-6,	Arg-21 to 1rp-30,	Glu-40 to Ala-56,	Thr-83 to Trp-89.	Pro-22 to Thr-28,	Gly-35 to Cys-43.		
13844	13845	13846	13847	13848	13849	13850	13851	13852	13853		13854			13855	13856	13857	13858	13859				13860	13861		13862				13863		13864	13865
240 - 629	2 - 178	2 - 121	278 - 445	150 - 413	195 - 365	157 - 360	51 - 500	133 - 261	2 - 190		65 - 388			53 - 181	92 - 262	2 - 124	198 - 323	3 - 263				28 - 114	1 - 408	000	3 - 290				16 - 372		41 - 280	128 - 259
4092	4093	4094	4095	4096	4097	4098	4099	4100	4101		4102			4103	4104	4105	4106	4107				4108	4109	4110	4110				4111		4112	4113
973285	968221	574484	574482	574488	574480	574481	860669	574478	574477		953672			657404	572904	572901	999098	572909				576763	796488	200062	C687/C		-		722062		572910	573152
HNGDO17	HNGDP10	HNGDP13	HNGDP27	HNGDP29	HNGDP30	HNGDP71	HNGDP74	HNGDP89	HNGDP95		HNGDR19			HNGDR42	HNGDR79	HNGDR81	HNGDR88	HNGDS04		-		HNGDS59	96SQDNH	UNICEPTOR	0C1UDNII				HNGDU45		HNGDV22	HNGDV25

																				-										
S0052: 2	S0052: 1 and S0428: 1.	S0052: 2			S0052: 2	H0421: 1 and S0052: 1.	S0052: 2	S0134: 1 and S0052: 1.	S0052: 2	S0052: 2 and S0428: 1.	S0052: 2		S0052: 2	S0052: 2	S0052: 1 and S0053: 1.			S0052: 2	S0052: 2		S0052: 2	S0052: 3	AR054: 9, AR051: 4,	AR050: 0	H0556: 1 and S0052: 1.	S0052: 2	S0052: 1 and S0216: 1.	S0052: 2	S0052: 1 and S0428: 1.	S0053: 2, H0439: 1, L0809:
Pro-2 to Ser-10, Ser-16 to His-21.		Gly-9 to Arg-19, Thr-23 to Trp-31,	Pro-37 to Arg-44,	Arg-65 to Ala-73.		Thr-25 to Glu-31.	Thr-1 to Gly-18.		Gln-7 to Thr-17.	Arg-17 to Cys-24, Pro-39 to Met-44.	Lys-13 to Leu-26,	Glu-61 to Arg-70.	Asp-1 to Ser-9.		Gly-10 to Arg-21,	Val-28 to Lys-37,	Pro-54 to Tyr-59.	Thr-23 to Leu-32.	Pro-25 to Ala-33,	Lys-42 to His-48.	Ala-10 to Cys-16, Arg-33 to Trp-40.		Pro-7 to Gly-13,	Gly-18 to Gly-38.		Ala-1 to Tyr-8.		Gln-1 to Thr-7.		Arg-1 to Trp-11,
13866	13867	13868			13869	13870	13871	13872	13873	13874	13875		13876	13877	13878			13879	13880		13881	13882	13883			13884	13885	13886	13887	13888
112 - 2	192 - 446	3 - 221			80 - 274	267 - 425	23 - 142	289 - 552	1 - 258	218 - 409	3 - 212		221 - 361	2 - 118	1 - 177			20 - 190	2 - 220		12 - 242	123 - 338	487 - 846			2 - 157	11 - 217	258 - 374	162 - 359	199 - 597
4114	4115	4116			4117	4118		4120			4123		4124	4125	4126			4127	4128		4129	4130	4131			4132	4133	4134	4135	4136
739407	796487	576773			573162	661943	860661	870390	968042	572908	920168		572865	572855	778879			578911	576743		572862	924912	917530			935840	782294	573040	806031	616809
HNGDV59	96AGDNH	HNGDW23			HNGDW62	HNGDM95	HNGDX50	HNGDY12	HNGDY14	HNGDY39	HNGDY92		HNGDZ52	HNGEA44	HNGEA82			HNGEA88	HNGEB79		HNGEB81	HNGEB91	HNGEC02			HNGEC06	HNGEC41	HNGEC43	HNGEC44	HNGEC75

1, S0052: 1 and L0758: 1.	S0052: 1 and S0428: 1.	S0052: 2	S0052: 2	S0052: 1 and S0428: 1.	S0052: 2		S0052: 4				S0052: 2	S0052: 2	S0052: 2	S0428: 2 and S0052: 1.	S0052: 2	S0052: 2		0 0000	S0052: 2	S0052: 2	S0052: 3		H0318: 1 and S0052: 1.	S0052: 2		S0052: 3		S0052: 2		S0052: 1, S0428: 1 and
Pro-19 to Ser-33.	Ala-1 to Arg-9, Ala-22 to Gln-33.	Asp-29 to Gln-42.			Val-16 to His-21,	Ser-49 to Cys-59.	Pro-5 to Asn-10,	Trp-24 to Ser-29,	Met-58 to Arg-65,	Ala-67 to Gly-72, Glu-78 to Glu-86.		Thr-37 to Gly-42.		Thr-20 to Tyr-26.		Arg-2 to Lys-23,	Gly-34 to Gly-45,	131 01 10 133 07:				Gly-27 to Gly-34,			Thr-26 to Lys-33.	Gly-1 to Asn-8,	Ala-23 to Ala-34, Ile-80 to Trp-87.	Ser-1 to Lvs-14.	Gly-18 to His-30, Glu-35 to Lys-40.	
	13889	13890	13891	13892	13893		13894				13895	13896	13897	13898	13899	13900	-	12001	13901	13902	13903		13904	13905	,	13906		13907		13908
	2 - 259	3 - 194	95 - 277	3 - 287	1 - 207		1 - 306		,		12 - 305	22 - 168	200 - 418	77 - 223	2 - 172	2 - 241		140 450	142 - 453	. 53 - 253	1 - 195		263 - 490	47 - 202	,	1 - 291		46 - 342		1 - 333
	4137	4138	4139	4140	4141		4142				4143	4144	4145	4146	4147	4148		4140	4149	4150	4151		4152	4153		4154		4155		4156
	924696	920156	572868	790309	573018		573065				708692	572880	860685	784431	573049	967310		7200471	/204/1	932199	273066		934987	572864	1, 4,	576745		753159		958363
	HNGED03	HNGED21	HNGED77	HNGED91	HNGEE18		HNGEE39				HNGEF58	HNGEG45	HNGEG74	HNGEG85	HNGEG86	HNGEI22		TELEGISTA	HNGEI4/	HNGEJ04	HNGEJ22		HNGEJ35	HNGEK30		HNGEK44		HNGEK68		HNGEL62

																																120435, 120435,
																																2p22-p21
L0748: 1.	S0052: 2 and S0428: 1.	S0052: 2	S0052: 2		AR089: 1, AR061: 0	80052: 2	S0052: 2	S0052: 2		S0052: 2			H0306: 1, H0402: 1, H0305:	1 and S0052: 1.	S0052: 2	S0052: 1 and S0053: 1.	H0271: 1, S0052: 1 and	L0439: 1.	S0052: 1, S0216: 1 and	H0445: 1.	S0052: 1 and S0216: 1.	H0341: 1, L0769: 1, L0789:	1, L0791: 1, S0052: 1 and	L0777: 1.	S0052: 2 and S0428: 1.	S0052: 2	AR061: 3, AR089: 2 S0052: 3	S0052: 2	AR061: 1, AR089: 1	L0748: 5, H0444: 2, H0402:	1, L0367: 1 and S0052: 1.	S0052: 2
		Gln-1 to Ala-9, Cvs-24 to Lvs-31.	Pro-27 to Gly-34,	Ser-37 to Arg-42.	Asn-9 to Arg-14,	Asn-21 to Leu-26.	Ser-15 to Thr-21.	Gln-32 to Asn-39,	Arg-67 to Ser-73.	Gln-10 to Ala-20,	Thr-36 to Gly-43,	Arg-69 to Ile-74.	Val-1 to Lys-12.		His-1 to Asp-7.		Gly-1 to Gly-9,	Glu-67 to Arg-73.			Ala-15 to Phe-23, Glu-35 to Gly-41.	Thr-7 to Gly-13.	•						Asn-1 to Gly-6,	Gln-23 to Gly-29.		
	13909	13910	13911		13912		13913	13914		13915			13916		13917	13918	13919		13920		13921	13922			13923	13924	13925	13926	13927			13928
	152 - 373	156 - 272	42 - 272		2 - 259		204 - 362	1 - 273		2 - 226			338 - 75		31 - 108	113 - 268	145 - 366		266 - 880		44 - 349	3 - 278			73 - 270	2 - 97	97 - 204	337 - 507	226 - 546	•		116 - 319
	4157	4158	4159		4160		4161	4162		4163			4164		4165	4166	4167		4168		4169	4170			4171	4172	4173	4174	4175			4176
	572867	573041	860643		663955		572876	732262		576749			860631		572858	766574	861710		778161		953647	572984			860687	572873	699391	578903	945838			586451
	HNGEL92	HNGEM38	HNGEM53		HNGEN37		HNGEN45	HNGEP55		HNGEP61			HNGEP64		HNGEP70	HNGEP75	HNGEP77		HNGEP81		HNGEQ07	HNGEQ32			HNGEQ67	HNGER25	HNGER43	HNGER67	HNGER82			HNGER84

126600, 135300, 136435, 152790, 152790, 157170, 182601, 278300, 601071, 601771, 602134														,											225500, 600593, 602363
																<u></u>									4p16
	S0052: 1 and S0428: 1.	S0114: 1 and S0052: 1.		H0444: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 8		S0052: 2 and H0063: 1.	S0052: 2	S0052: 3	H0255: 2 and S0052: 1.		S0052: 2		S0052: 3	S0052: 2	S0052: 2	L0748: 2, S0218: 1, S0052:	1, L0746: 1, L0749: 1 and L0608: 1.	S0052: 2	S0052: 2	S0052: 1 and S0053: 1.	S0052: 2
			Ala-7 to Thr-12,	Pro-37 to Gly-44.	Glu-8 to Gln-15.			Gln-11 to Cys-17,	Phe-26 to Gly-34, Ala-45 to Phe-53.	Pro-29 to Thr-34, Ser-59 to Thr-66.		Pro-7 to Ser-13.		Lys-1 to Gly-9.	His-1 to Arg-7,	Arg-78 to Leu-83, Cvs-87 to Glv-99.				Ile-54 to Gln-70.			Arg-14 to Asp-23.	Thr-9 to Lys-15.	
	13929	13930	13931		13932	13933	13934	13935		13936	13937	13938	13939	19335	13940		13941	13942	13943	13944		13945	13946	13947	13948
	3 - 362	2 - 265	381 - 524		1 - 240	190 - 324	67 - 219	49 - 219		396 - 695	146 - 15	48 - 404	373 - 486	468 - 620	3-326		110 - 316	65 - 211	186 - 317	390 - 599		1 - 141	~	2 - 103	149 - 340
	4177	4178	4179		4180	4181	4182	4183		4184	4185	.4186	4187	9583	4188		4189	4190	4191	4192		4193	4194	4195	4196
	95236	733543	490034		573013	953618	506498	953529		853582	860626	781207	490914	537746	572882		572894	573090	576750	750391		573089	506312	789128	750542
	HNGER96	HNGES56	HNGES59		HNGES89	HNGET07	HNGET31	HNGET67		HNGEU35	HNGEU37	HNGEV33	HNGEV34		HNGEV38		HNGEV40	HNGEV53	HNGEV59	HNGEV65		HNGEV70	HNGEV75	HNGEV86	HNGEV88

S0052: 1 and S0428: 1.	S0052: 2	S0052: 3 and S0428: 1.	S0052: 2	H0179: 1 and S0052: 1.	80052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	H0179: 1 and S0052: 1.	S0052: 3		S0052: 1 and S0216: 1.	S0052: 2		S0052: 1 and S0428: 1.	80052: 2	S0052: 1 and S0428: 1.	S0052: 2	H0305: 2 and S0052: 1.			80052: 2	S0052: 2	S0052: 1 and S0053: 1.	S0052: 1 and S0053: 1.		S0052: 2
Ser-11 to Tyr-16.	Ile-44 to His-52.	Thr-1 to Phe-7, Ile-39 to Asn-45.						Val-21 to Gly-33, Glu-45 to Gly-50.	Ser-22 to Trp-31.	Glu-7 to Asn-15.	Glu-1 to Gln-18,	Lys-46 to Lys-53.		Thr-17 to Gly-30,	Gly-32 to Val-38.					Gly-1 to Ala-15,	Ala-17 to Ser-25,	Pro-32 to Arg-44, Pro-55 to His-60.	Pro-14 to Ser-21.	Pro-2 to Thr-11,	Glu-25 to Trp-33, Leu-49 to Arg-55.	Pro-10 to Ser-19,	Ser-29 to Leu-47, Ala-60 to Gly-66.	
13949	13950	13951	13952	13953	13954	13955	13956	13957	13958	13959	13960		13961	13962		13963	13964	13965	13966	13967			13968	13969	13970	13971		13972
14 - 136	104 - 274	147 - 323	14 - 376	59 - 337	124 - 327	123 - 293	2 - 154	1 - 171	256 - 426	188 - 481	79 - 333		248 - 679	41 - 478		148 - 2	151 - 318	65 - 349	3 - 131	1 - 339			129 - 263	2 - 136	3 - 167	54 - 470		1 - 366
4197	4198	4199	4200	4201	4202	4203	4204	4205	4206	4207	4208		4209	4210		4211	4212	4213	4214	4215			4216	4217	4218	4219		4220
958328	572874	935838	959230	834919	572897	973310	190919	920375	790222	752239	574462		774277	424813		952235	276719	963490	959738	573575			868072	573024	573160	835997		823462
HNGEW18	HNGEW76	HNGEX06	HNGEX35	HNGEX76	HNGEX95	HNGEY41	HNGEY50	HNGEY60	HNGEY80	HNGEY84	HNGEZ45		HNGFA28	HNGFA39		HNGFA41	HNGFA67	HNGFA80	HNGFB08	HNGFB52			HNGFB57	HNGFB74	HNGFC71	HNGFD63		HNGFD75

																													•	
S0052: 1 and S0428: 1.	S0052: 2, L0742: 2 and L0592: 1.	S0052: 1 and S0428: 1.	AR061: 8, AR089: 3	S0052: 2		H0305: 2 and S0052: 1.	S0052: 2 and L0748: 1.				S0052: 1 and S0428: 1.			!	S0052: 1 and S0428: 1.			S0052: 1 and S0428: 1.	S0052: 2	H0255: 1 and S0052: 1.	S0052: 2	S0002: 1 and S0052: 1.	AR061: 6, AR089: 2	S0052: 3		٠				
Lys-7 to Thr-20, Ser-28 to Gly-43.		Pro-1 to Asn-10, Arg-23 to Cys-29.	Gly-25 to Ser-35,	Ser-44 to Val-49,	Ser-51 to Asp-57.		Arg-1 to Lys-8,	Arg-60 to Trp-66,	Leu-68 to IIe-74,	Glu-82 to Gly-89.	Pro-6 to Ser-13,	Arg-19 to Gln-35,	Thr-54 to Ala-61,	His-73 to Cys-78.	Lys-1 to Arg-15,	Pro-17 to Asp-23,	Pro-38 to Lys-44.		Gly-20 to Lys-26, Pro-40 to Lys-47.				Glu-4 to Asn-15,	Ser-104 to Gly-111,	Glu 4 to Acr 15	Old-4 to Ash-15,	Ser-104 to Gly-111,	Cln 1 to 110 15	OIII-1 to 116-12,	Leu-76 to Arg-82, Glu-90 to Thr-96.
13973	13974	13975	13976			13977	13978				13979				13980			13981	13982	13983	13984	13985	13986		10226	17770		10227	12221	
118 - 351	40 - 285	194 - 451	91 - 261			45 - 200	40 - 339				1 - 315				262 - 393	•		240 - 371	90 - 332	224 - 346	202 - 381	78 - 272	1 - 756		1 756	00/- 1		351_1	1 - 100	
4221	4222	4223	4224			4225	4226				4227				4228			4229	4230	4231	4232	4233	4234		0584	•		0585	2000	
783467	968248	805996	573084			725787	860595				926873				966118			935828	278896	699398	578892	860591	544726		566798			043114	+117717	
HNGFD85	HNGFD96	HNGFF35	HINGFG22			HNGFG51	HNGFG57				HNGFG69				HNGFH94			HNGFI06	HNGF120	HNGFI32	HNGFI81	HNGF127	HNGFK28							

	T			T	$\neg$		Γ				Т	Τ	Τ						Τ			Π	Τ	Τ	Τ	Γ	1
						<del>-</del>																					
	S0052; 2	S0052: 2	S0052: 2	H0583: 1, H0402: 1 and	50052: 1.	S0052: 2 	S0052: 3, H0556: 1 and	L0777: 1.	S0052: 3	S0052: 2	S0052: 2	H0580-2 and S0052-1	S0052.2	30002.2				AR061: 2, AR089: 0 S0052: 2	S0052: 2	S0052: 2		S0052: 1 and S0053: 1.	S0052: 2	S0052: 3	H0580: 1 and S0052: 1.	S0052: 2 and H0583: 1.	S0052: 1 and S0428: 1.
Glu-6 to Asn-17, Ser-106 to Gly-113.		Ser-4 to Thr-12, Thr-23 to Thr-30.	Thr-2 to Arg-11, Asp-30 to Gly-35.	Glu-19 to Pro-24,	Der 25 to Co. 40	Pro-53 to Ser-40, Thr-64 to Ser-70.	Ser-12 to Thr-19,	Pro-58 to Gln-65.		Gln-21 to Gly-29, Pro-39 to Asn-44		Pro-1 to Glv-6.	I.ys-16 to Arg-71	1 22 20 to Day 25	Leu-30 to Pro-35,	Asn-48 to Gly-53,	Ala-68 to Ser-78.	Pro-48 to Gly-55.	Lys-25 to Glu-36.	Gln-34 to Gly-39,	Lys-70 to Gly-80.			Asn-1 to Gln-9.	His-1 to Gly-15.	Thr-22 to Asp-28, Glu-43 to Gly-49.	Lys-8 to Lys-19, Glu-25 to Glu-34, Ala-38 to Gln-53
19338	13987	13988	13989	13990	-	15991	13992		13993	13994	13995	13996	13997	17771				13998	13999	14000		14001	14002	14003	14004	14005	14006
3 - 530	46 - 177	1 - 153	1 - 324	471 - 310	1 200	1 - 300	2 - 205		167 - 349	1 - 285	170 - 295	3-215	3 - 266	207				69 - 263	11 - 205	2 - 376		42 - 302	109 - 372	187 - 360	74 - 370	109 - 279	89 - 286
9286	4235	4236	4237	4238	4230	4239	4240		4241	4242	4243	4244	4245	9				4246	4247	4248		4249	4250	4251	4252	4253	4254
943115	860589	572833	584729	578884	202078	000383	572821		970740	276698	770209	935135	572856					526792	920483	959730		573052	931021	707332	703715	576715	920482
	HNGFK44	HNGFL04	HNGFM50	HNGFM74	HNGFM70	UNGLIM/9	HNGFN21		HNGFN56	HNGFN65	HNGFN96	HNGF046	HNGF055	3				HNGF081	HNGFP02	HNGFP08		HNGFP62	HNGFP80	HNGFP93	HNGFQ36	HNGFQ58	HNGFR02

										,																						
S0053: 2 and S0052: 1.	S0052: 1, S0428: 1 and	L0748: 1.	S0052: 2 and H0063: 1.	S0052: 3	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 1 and S0053: 1.		S0052: 1 and S0216: 1.	AR089: 4, AR061: 1	S0052: 1 and S0428: 1.	S0052: 2	S0052: 2	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 3	S0052: 2	S0052: 2	H0250: 2 and S0052: 2.		S0052: 2	S0052: 2 and S0428: 1.	S0052: 2	S0052: 3	S0052: 2
	Cys-41 to Ser-47.			Pro-7 to Lys-20, Glu-45 to Cys-50.	Phe-17 to His-23.				Met-13 to Phe-23,	Gln-29 to Trp-40, Arg-63 to Lys-71.	Gly-1 to Glu-9.				Arg-16 to Thr-40.				Trp-8 to Ser-14.	Ile-1 to Asn-21,	Lys-38 to 1 hr-43.	Ser-3 to Leu-10.		Ser-34 to Phe-41.		Leu-39 to Ile-46,	Pro-48 to Pro-53.	Thr-45 to Cys-53.		Gly-56 to Ala-62.		
14007	14008		14009	14010	14011	14012	14013	14014	14015		14016	14017		14018	14019	14020	14021	14022	14023	14024	2001	14025	14026	14027	14028	14029		14030	14031	14032	14033	14034
37 - 303	178 - 450		268 - 405	185 - 337	151 - 240	3 - 209	2 - 313	132 - 341	2 - 214		113 - 328	45 - 290		82 - 189	2 - 367	2 - 211	15 - 326	218 - 340	3 - 200	149 - 331	i i	/8-/	360 - 473	78 - 206	102 - 263	27 - 290		68 - 256	136 - 2	154 - 348	1 - 210	217 - 294
4255	4256		4257	4258	4259	4260	4261	4262	4263		4264	4265		4266	4267	4268	4269	4270	4271	4272	2507	42/3	4274	4275	4276	4277		4278	4279	4280	4281	4282
573358	860245		646263	576713	572838	573094	932396	572828	621299		772335	971170		860576	559450	924670	806047	. 924693	578901	578864	170000	839957	959715	959637	964820	764502		506337	577362	576212	572869	881399
HNGFR16	HNGFR48		HNGFR73	HNGFR80	HNGFR85	HNGFS46	HNGFS58	HNGFS71	HNGFT19		HNGFT77	HNGFU12		HNGFU28	HNGFU40	HNGFV03	HNGFV32	HNGFW09	HNGFW15	HNGFW31	TO TATA	HINGF W 82	HNGFW96	HNGGA08	HNGGA10	HNGGA20		HNGGA40	HNGGA44	HNGGA53	HNGGA90	HNGGB09

S0052: 2	S0052: 2 and S0428: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 3	S0052: 2		S0052: 2		S0052: 4		S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2	
	Gly-8 to Arg-17.			Gly-18 to Thr-24, Pro-38 to Lys-45.	Arg-15 to Leu-20.	Arg-1 to Val-10,	Ser-15 to Phe-24,	Pro-23 to Asn-28,	Ser-43 to Gly-51, Gly-75 to Tm-86.	Ser-7 to Asp-19,	Trp-32 to Val-38,	Tyr-18 to Asn-23.	Ala-27 to Gln-32.	Gln-9 to Glu-14.		Asn-28 to Ser-35, Lys-50 to Pro-56.			Gln-10 to Gln-18, Glu-25 to Val-30.		Gly-6 to Ala-14.	Leu-9 to Cys-14,	Ile-44 to Asp-50, Ser-56 to Leu-62.	Lys-16 to His-21, Ala-32 to Tyr-37.	Glu-19 to Gly-26, Gly-41 to Thr-47,	Ser-79 to Glu-85.
14035	14036	14037	14038	14039	14040	14041		14042		14043		14044	14045	14046	14047	14048	14049	14050	14051	14052	14053	14054		14055	14056	
28 - 171	53 - 136	56 - 301	165 - 383	19 - 153	65 - 226	131 - 319		2 - 298		9 - 185		2 - 160	64 - 282	124 - 276	2 - 106	2 - 283	135 - 296	160 - 309	127 - 378	89 - 232	1 - 156	106 - 303		3 - 143	169 - 423	
4283	4284	4285	4286	4287	4288	4289		4290		4291		4292	4293	4294	4295	4296	4297	4298	4299	4300	4301	4302		4303	4304	
964821	576217	840277	924587	935709	217369	576256		920379		964818	······································	576294	506304	576267	679153	576298	576295	733510	576296	576231	582695	576705		576278	860426	
HNGGE10	HNGGE38	HNGGF02	HNGGF03	HNGGF06	HNGGF26	HNGGF57		HNGGG02		HNGGG10		HNGGG15	HNGGG18	HNGGG22	HNGGG25	HNGGG26	HNGGG50	HNGGG56	HNGGG63	HNGGG76	HNGGH38	HNGGH48		HNGGH57	HNGGH64	

																																	7
S0052: 2	S0052: 2	S0052: 3	S0052: 2	S0052: 3	S0052: 2	S0052: 3 and L0600: 2.	S0052: 2	S0052: 2	80052: 2	S0052: 2	S0052: 2			S0052: 1 and S0428: 1.	S0052: 2	S0052: 2			S0052: 2	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2	80052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 1 and S0428: 1.	S0052: 2	S0052: 2	
	Lys-19 to Arg-26.		Asn-11 to Gly-18, Glu-28 to Gly-35.	Arg-14 to Arg-19.			Lys-1 to Lys-7.	Lys-20 to Trp-27.		Ser-1 to Tyr-7.	Gln-29 to Lys-35,	Lys-46 to Arg-52,	Ser-58 to Ser-63.	Lys-1 to Asn-8.	Ser-22 to Arg-28.	Asn-9 to Trp-16,	Ala-20 to Phe-31,	Lys-39 to Gly-45.	Arg-29 to Trp-34.	Ser-19 to Ser-24.		Pro-22 to Thr-28,	Pro-63 to Arg-70.		Pro-8 to Gly-18.	His-14 to Trp-27.		Gly-20 to Glu-28.	Lys-30 to Thr-36.	Phe-40 to Gln-48.		Gly-1 to Gln-8, Ser-16 to Arg-21.	0
14057	14058	14059	14060	14061	14062	14063	14064	14065	14066	14067	14068			14069	14070	14071			14072	14073	14074	14075		14076	14077	14078	14079	14080	14081	14082	14083	14084	
164 - 346	159 - 431	36 - 344	3 - 158	1 - 168	1 - 117	155 - 286	72 - 1	2 - 202	102 - 269	69 - 179	48 - 260			175 - 582	137 - 316	1 - 150			189 - 380	2 - 298	85 - 309	1 - 294		2 - 238	43 - 255	2 - 211	1 - 123	14 - 127	155 - 340	164 - 328	2 - 163	1 - 132	
4305	4306	4307	4308	4309	4310	4311	4312	4313	4314	4315	4316			4317	4318	4319			4320	4321	4322	4323		4324	4325	4326	4327	4328	4329	4330	4331	4332	
577192	924908	576214	959639	576270	825371	830081	576259	576253	576247	576255	851915			964819	576284	576219			576220	576287	576229	924578		576263	576268	708119	577319	967253	916754	860246	576277	576238	
HNGGH74	HNGGH78	HNGGH95	HNGGI08	HNGGI52	HNGGI58	HNGGI81	HNGGK31	HNGGK53	HNGGK86	HNGGK94	HNGGL51			HNGGM10	HNGGM41	HNGGM56			HNGGM67	HNGGM76	HNGGM92	HNGGN03		HNGGN04	HNGGN16	HNGGN36	HNGGN64	HNGGN94	HNGG001	HNGG014	HNGG025	HNGGQ31	

																						-		
L0748: 4, S0052: 1 and S0428: 1.	S0052: 2	S0052: 2 and S0428: 2.	L0748: 3, L0766: 1, S0052: 1, L0751: 1 and H0445: 1.	S0052: 3	S0052: 2	S0052: 2	AR089: 1, AR061: 0 S0052: 3	S0052: 6	S0052: 2	S0052: 2	S0052: 2	S0052: 2		S0052: 3	S0052: 3	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 4	S0052: 2	S0052: 2	S0052: 2
Trp-1 to Gly-7.		Arg-10 to Pro-18, Pro-38 to Asp-53.	Leu-49 to Asn-54.			Gly-14 to His-23, Trp-40 to Ser-53.		Pro-4 to Gly-14.	Tyr-1 to Asp-6, Thr-13 to Val-27.	Glu-8 to Glu-14, Thr-40 to Asn-53.		Pro-11 to Pro-16,	Arg-34 to Glu-39.		Ser-16 to Ser-26.	Gly-1 to Asn-25.			Cys-11 to Ser-17.		Tyr-12 to Gln-22.	Pro-10 to Cys-16, Pro-27 to Asn-33.		Pro-7 to Val-16, Ala-42 to Gly-47, Tyr-72 to Pro-82.
14085	14086	14087	14088	14089	14090	14091	14092	14093	14094	14095	14096	14097		14098	14099	14100	14101	14102	14103	14104	14105	14106	14107	14108
257 - 475	1 - 147	56 - 337	167 - 364	121 - 255	44 - 229	214 - 447	8 - 82	1 - 156	54 - 353	217 - 423	3 - 77	64 - 192		2 - 112	57 - 200	1 - 183	143 - 325	46 - 288	75 - 314	1 - 249	2 - 376	3 - 110	54 - 194	1 - 300
4333	4334	4335	4336	4337	4338	4339	4340	4341	4342	4343	4344	4345		4346	4347	4348	4349	4350	4351	4352	4353	4354	4355	4356
712426	576249	577327	916753	964815	576250	576246	869592	970861	825369	576305	576308	576312		751781	576740	576311	576297	719127	576302	576301	576299	725750	953549	576313
HNGGQ41	HNGGQ65	HNGGÓ89	HNGGR01	HNGGR10	HNGGR17	HNGGR43	HNGGR74	HNGGS09	HNGGS26	HNGGS33	HNGGS41	HNGGS66		L9SDDNH	HNGGS73	HNGGS78	HNGGT44	HNGGT46	HNGGT55	HNGGT57	HNGGT58	HNGGT62	HNGGV07	HNGGV55

S0052: 2, H0521: 1 and H0543: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2			S0052: 2	S0052: 2		S0052: 1 and S0428: 1.	S0052: 2		S0052: 2		S0052: 2			S0052: 2	80052: 2			S0052: 2	S0052: 3	S0052: 4	S0052: 2	S0052: 2		80052: 2	S0052: 2			S0052: 2
Tyr-4 to Ser-11.	Pro-7 to Arg-14.				Pro-2 to Leu-7,	Pro-25 to Cys-30,	Gly-42 to Glu-49.		Lys-38 to Arg-43,	1111-70 10 351-73.	Arg-37 to Thr-48.	Cys-20 to Ser-31,	Arg-50 to Ser-58.	Ser-22 to Ala-30,	Val-34 to Trp-41.	Ala-15 to Leu-20,	His-26 to Leu-33,	Cys-35 to Thr-46.	Arg-21 to Asn-26.	Pro-22 to Ser-29,	Thr-51 to Gly-61,	diy-/0 to 1118-0/.	Gly-13 to Pro-22.		Asn-6 to Thr-19.	Gly-1 to Gly-6.	Asn-69 to Glu-81,	Lys-104 to Ser-110.	Ala-102 to Pro-107.	Glu-2 to Pro-14,	Ala-29 to Thr-38,	Glu-45 to Gly-51.	Pro-14 to Cys-20, Asn-22 to Leu-31.
14109	14110	14111	14112	14113	14114			14115	14116		14117	14118		14119		14120			14121	14122			14123	14124	14125	14126	14127		14128	14129		-	14130
178 - 363	216 - 437	3 - 278	128 - 331	71 - 274	1 - 276			2 - 292	2 - 229	1	243 - 467	2 - 295		161 - 292		2 - 217			73 - 384	17 - 322		,	15 - 92	306 - 548	308 - 475	1 - 306	158 - 529		1 - 339	29 - 211			26 - 223
4357	4358	4359	4360	4361	4362			4363	4364.		4365	4366		4367		4368			4369	4370			4371	4372	4373	4374	4375		4376	4377			4378
781247	795920	868071	860551	576188	576193			576222	953539		860553	576213		276300		772279			860552	276306			506261	463007	733509	276769	576215		932099	860544			576314
HNGGV70	HNGGV95	HNGGX46	HNGGX49	HNGGX91	HNGGX93			HNGGX95	HNGHA08	0.000	HNGHA10	HNGHA47		HNGHA70		HNGHA77			HNGHB07	HNGHB31		000000000000000000000000000000000000000	HNGHB33	HNGHB48	HNGHB55	HNGHB80	HNGHB91		HNGHD04	HNGHD09			HNGHD22

																	!								
S0052: 2	S0052: 2	S0052: 3	S0052: 2	S0052: 3	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 5	S0052: 2	80052: 2		S0052: 2	80052: 2		S0052: 2		S0052: 2	S0052: 2 and S0428: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2
Phe-1 to Ser-6, Gln-8 to Glu-20, Leu-54 to Ala-60.			Arg-24 to Gly-29.			Pro-7 to Gly-14, Pro-28 to Gln-34.		Gly-21 to Ile-32, Lys-34 to Trp-41.		Gly-1 to Ser-12, Pro-21 to Ser-27.	Lys-7 to Gly-14,	rile-20 to Gly-33.	Pro-11 to Gly-16.	Gly-2 to Pro-11,	Ala-27 to Leu-36, Pro-38 to Tro-43.	Gly-1 to Gly-9,	Tyr-14 to Ser-20.	Gly-1 to Lys-6, Leu-10 to Pro-20.	Lys-1 to Glu-35.			Gln-26 to Arg-34, Glu-40 to Arg-45.		Asp-1 to Lys-13.	His-1 to Leu-6, Gln-23 to Thr-42.
14131	14132	14133	14134	14135	14136	14137	14138	14139	14140	14141	14142	ļ	14143	14144		14145		14146	14147	14148	14149	14150	14151	14152	14153
61 - 318	82 - 357	321 - 443	71 - 184	64 - 180	41 - 280	169 - 357	31 - 279	232 - 516	2 - 157	1 - 177	129 - 263		147 - 260	216 - 344		1 - 183		1 - 384	130 - 348	26 - 211	39 - 164	39 - 173	182 - 319	230 - 376	3 - 143
4379	4380	4381	4382	4383	4384	4385	4386	4387	4388	4389	4390		4391	4392		4393		4394	4395	4396	4397	4398	4399	4400	4401
506262	836226	576317	953540	576209	576197	577124	576202	753107	779951	971736	577414		576230	576232		576218		924570	577354	582685	576208	576205	216206	576195	576191
HNGHD25	HNGHD59	HNGHD67	HNGHE07	HNGHE17	HNGHE52	HNGHE56	HNGHE62	HNGHE69	HNGHE95	HNGHG15	HNGHG22		HNGHG56	HNGHG68		HNGHG71		HNGHJ26	HNGHK13	HNGHK42	HNGHK44	HNGHK46	HNGHK48	HNGHK50	HNGHK53

								:																										
S0052: 3	S0052: 1 and S0428: 1.		S0052: 2	S0052: 2			-		S0052: 3, L0752: 2, S0114:	1, L0662: 1 and L0547: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 3	S0052: 2	S0052: 2			S0052: 2	S0052: 2			S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2	S0052: 3	
Ala-1 to Asn-20.	Lys-11 to Thr-23,	Gln-40 to Ile-47.	Gln-45 to Leu-76.	Arg-2 to Gly-20,	Pro-23 to Pro-33,	Trp-41 to Gly-48,	Cys-74 to Ser-79,	Asn-84 to Gly-89.	Lys-17 to Arg-24.					Pro-38 to Leu-48.		Ser-1 to Asp-10,	Asn-29 to Ser-34,	Gln-60 to Lys-77.	Pro-14 to Arg-20.	Thr-47 to Gly-56,	Thr-71 to Ser-77,	Arg-85 to Arg-90.	Ala-69 to Ser-75.	Arg-1 to Gln-21.	Asp-19 to Leu-30.	,	Thr-31 to Phe-43.		Met-5 to Gln-19,	Gly-21 to Leu-29.			Pro-24 to Ser-29,	Asn-52 to Ser-4/, His-53 to Pro-58.
14154	14155		14156	14157					14158		14159	14160	14161	14162	14163	14164			14165	14166			14167	14168	14169	14170	14171	14172	14173		14174	14175	14176	
2 - 205	144 - 494		3 - 242	108 - 410					160 - 246		232 - 2	38 - 358	2 - 187	1 - 159	163 - 306	67 - 315			2 - 244	3 - 281			2 - 226	70 - 255	16 - 249	61 - 354	198 - 428	91 - 297	22 - 237		2 - 232	216 - 1	110 - 283	
4402	4403		4404	4405					4406		4407	4408	4409	4410	4411	4412			4413	4414			4415	4416	4417	4418	4419	4420	4421		4422	4423	4424	
576207	772277		964814	696826					576326		576223	576226	276320	697905	772283	576741			576325	713805			421742	576165	576111	576681	733881	576108	576110		576170	785566	506259	
HNGHK68	HNGHK77		HNGHL10	HNGHL20					HNGHL22		HNGHL51	HNGHL52	HNGHT 65	9LTHDNH	HNGHT 77	HNGHM33			HNGHM36	HNGHM51			HNGHN22	HNGHN40	HNGHN42	HNGHN52	HNGHN56	HNGHN70	HNGHN75		HNGHN76	HNGHN86	HNGHN93	

																					123620, 151410, 600850									
																					22q11.21									
S0052: 2		S0052: 2	S0052: 2	S0052: 2	80052: 3	S0052: 2	S0052: 3	S0052: 2	S0052: 4	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0212: 1 and S0052: 1.	80052: 2	S0052: 3	S0052: 3	S0052: 3	S0052: 2	S0052: 3	S0052: 2	S0052: 3			S0052: 2	S0052: 2
Pro-26 to His-33,	Pro-35 to Gly-48.	Ser-69 to Gly-75.		Pro-22 to Pro-28.	Gln-41 to Thr-55.		Arg-4 to Lys-11.		Lys-19 to Thr-27, Pro-79 to Ser-86	Ser-19 to Met-25.	Ser-8 to Trp-14.	Pro-27 to Lys-32,	Arg-43 to Ile-50.				Asp-22 to Thr-27.		Pro-21 to Leu-28.	Glu-18 to Arg-28.	Leu-16 to Gly-23.	Asn-14 to Lys-22.	Lys-59 to Arg-64.	Ser-31 to Pro-36, Arg-44 to Arg-55.		His-1 to Cys-9,	Gln-34 to Lys-46,	Val-50 to Lys-02, Phe-64 to Lys-70.		Arg-18 to Gly-49.
14177		14178	14179	14180	14181	14182	14183	14184	14185	14186	14187	14188		14189	14190	14191	14192	14193	14194	14195	14196	14197	14198	14199	14200	14201			14202	14203
1 - 150		175 - 438	40 - 246	118 - 318	1 - 192	74 - 241	79 - 375	148 - 333	26 - 328	46 - 324	125 - 349	93 - 245		20 - 139	3 - 179	112 - 237	262 - 426	156 - 272	51 - 188	1 - 180	1 - 276	18 - 140	1 - 273	210 - 434	152 - 364	154 - 438			3 - 254	95 - 247
4425		4426	4427	4428	4429	4430	4431	4432	4433	4434	4435	4436		4437	4438	4439	4440	4441	4442	4443	4444	4445	4446	4447	4448	4449			4450	4451
928026	1	576127	920373	964804	576168	420281	576173	575735	576142	840278	576174	576178		576136	577357	576053	577335	683507	576262	576144	576105	770126	723008	576196	576199	576210			935706	576149
HNGHN94	101 01 01 01	HNGHN95	HNGH002	HNGH010	HNGH015	HNGH026	HNGH028	HNGH032	HNGH036	HNGHO62	HNGHO66	HNGHP28		HNGHP66	HNGHP74	HNGHP91	HNGHP95	HNGHQ27	HNGHQ43	HNGHQ55	HNGHQ72	HNGHQ76	HNGHO96	HNGHR04	HNGHR79	HNGHR83			HNGHT06	HNGHT92

																															,	
S0052: 2	S0052: 3	H0318: 1 and S0052: 1.	S0052: 3	S0052: 2 and H0656: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 3 and S0428: 1.		S0052: 1 and S0428: 1.	S0052: 3	S0052: 2 and S0053: 1.	S0052: 2	S0052: 1 and S0053: 1.		S0052: 2	S0052: 2	S0052: 1 and S0053: 1.	S0052: 2				S0052: 2	S0052: 2	S0052: 1 and S0053: 1.	S0052: 2	S0052: 2	S0052: 2		S0052: 2	S0052: 2
Ile-9 to His-25.	Ser-32 to Phe-37.	Pro-7 to Asn-12.		Glu-17 to Ser-24.		His-10 to Glu-16,		Lys-39 to Pro-45.	Trp-5 to Gly-18,	Ser-29 to Ser-42.	Asn-23 to Lys-34.	Pro-28 to Ser-36.			Pro-7 to Ser-12,	Phe-90 to Glu-96.	Val-1 to Trp-11.			Leu-17 to Leu-24,	Tyr-26 to Trp-39,	Arg-47 to His-58,	Ala-69 to Ile-76.	Lys-33 to Gly-40.	Pro-13 to Gln-22.	Arg-40 to Pro-46.		Ala-1 to Ser-7.	Thr-18 to Leu-23,	Asp-42 to Cys-48.		Arg-21 to Pro-28, Lys-31 to Trp-37.
14204	14205	14206	14207	14208	14209	14210	14211	14212	14213		14214	14215	14216	14217	14218		14219	14220	14221	14222				14223	14224	14225	14226	14227	14228		14229	14230
8 - 211	304 - 438	180 - 275	18 - 185	30 - 371	3 - 149	1 - 147	117 - 323	56 - 268	89 - 265		138 - 242	1 - 309	60 - 182	127 - 351	1 - 444		112 - 264	123 - 1	88 - 267	34 - 399				66 - 200	54 - 203	221 - 361	2 - 97	2 - 226	3 - 152		1 - 78	1 - 117
4452	4453	4454	4455	4456	4457	4458	4459	4460	4461		4462	4463	4464	4465	4466		4467	4468	4469	4470				4471	4472	4473	4474	4475	4476		4477	4478
953531	577363	730769	576139	860532	576181	716649	576269	576155	288879		934280	576177	921946	967226	660399		576114	690898	751668	576117				576120	577358	577189	920362	576122	576123		576154	576156
HNGHY07	HNGHY31	HNGHY54	HNGHY78	HNGHZ17	HNGHZ48	HNGHZ51	HNGIA19	HNGIA40	HNGIA66		HNGIC34	HNGIC67	HNGID03	HNGID11	HNGID15		HNGID16	HNGID33	HNGID67	HNGID78				HNGID80	HNGID89	HNGID91	HNGIH02	HNGIH56	HNGIH94		HNGII16	HNGII47

S0052: 2	S0052: 2		S0052: 2	S0052: 2 and S0053: 1.	S0052: 1 and S0428: 1.	S0052: 2	S0052: 3	S0052: 3		S0052: 2	S0052: 3	S0052: 3	S0052: 3	S0052: 2			S0052: 2	S0052: 1 and H0422: 1.	•.	S0052: 2			H0083: 1 and S0052: 1.	80052: 2	S0052: 2	S0052: 3			S0052: 1 and H0423: 1.		S0052: 1 and S0428: 1.	S0052: 2
Asn-6 to Thr-16.	Trp-22 to Gly-28,	Arg-46 to Ser-52.	Ser-30 to Gln-37.	Ala-1 to Ala-13, Val-17 to Ile-27.	Ser-19 to Lys-26.		Gln-16 to Asn-22.	Pro-5 to Ser-11,	Lys-17 to Tyr-23.	Cys-13 to Ile-18.		Pro-10 to Pro-31.		His-1 to Arg-8,	Gly-24 to Gly-38,	Glu-41 to Trp-47.	Ser-13 to Val-27.	Lys-1 to Tyr-7,	Arg-43 to Gln-48.	Leu-6 to Pro-11,	Leu-16 to Trp-23,	Lys-35 to Leu-42.	Pro-41 to His-53.	Arg-1 to Leu-21.		Gln-19 to Ala-34,	Ser-41 to Lys-48,	Ser-53 to Lys-59.	Tyr-1 to Lys-8,	Phe-11 to Asp-16.		His-47 to Pro-52, Arg-58 to Gly-67.
14231	14232		14233	14234	14235	14236	14237	14238		14239	14240	14241	14242	14243			14244	14245		14246			14247	14248	14249	14250			14251		14252	14253
3 - 158	149 - 367		3 - 113	2 - 142	67 - 168	59 - 262	73 - 258	2 - 223		1 - 141	163 - 306	122 - 448	132 - 218	3 - 230			3 - 149	291 - 434		168 - 332	<u>, , , , , , , , , , , , , , , , , , , </u>		30 - 215	135 - 254	2 - 268	57 - 233			55 - 216		219 - 521	3 - 254
4479	4480		4481	4482	4483	4484	4485	4486		4487	4488	4489	4490	4491			4492	4493		4494			4495	4496	4497	4498			4499		4500	4501
915340	576158		576153	576102	916748	925597	964809	860526		576224	506355	779901	712362	713817			772230	839952		715328			615308	653221	770078	788715			783495		964991	666515
HNGII50	HNGII74		HNGII76	HNGII85	HNGIJ01	HNGIJ05	HNGIJ11	HNGIJ59		HNGIJ66	HNGIJ67	HNGIJ96	HNGIK41	HNGIK42			HNGIK77	HNGIL27		HNGIL43			HNGIM04	HNGIM46	HNGIM76	HNGIM90			· HNGIM92		HNGIN11	HNGIN18

											-					,							•				-				-			
																	-																	
S0052: 1 and S0216: 1.	S0052: 3		S0052: 2 and H0341: 1.	S0052: 2, L0663: 1, S0053:	S0052. 1 and S0428. 1	S0052: 1 and S0428: 1.	S0052: 3	S0052; 2	S0052: 2	S0052: 2			S0052: 2	S0052: 2	S0052: 2	S0052: 2			80052: 2	S0052: 2	S0052: 1 and S0053: 1.	L0803: 6, L0756: 5, L0731:	5, L0794: 3, L0755: 3,	L0774: 2. L0805: 2. S0052:	2, L0746; 2, L0777; 2,	L0598: 1, L0646: 1, L0766:	1, L0606; 1, L0661; 1,	L0367: 1. L0666: 1. H0522:	1, L0742; 1, L0748; 1,	L0740: 1, L0754: 1, L0745:	1, L0749: 1, L0779: 1,	L0758: 1 and L0608: 1.	H0580: 1 and S0052: 1.	S0052: 1 and S0216: 1.
Gln-20 to Arg-25.	Glu-1 to Thr-8,	Arg-15 to Asp-26.		Glu-2 to Glu-18, Glv-50 to Ala-55	Gh-52 to Ser-60	Tle-42 to Glv-47			Gly-15 to Arg-20.	His-1 to Glu-6,	Gly-19 to Ser-24,	Ile-28 to Pro-40.	Gly-1 to Lys-14.		Arg-24 to Tyr-34.	His-11 to Ser-22,	Leu-35 to Thr-41,	Gln-45 to Gln-50.			Asn-39 to His-45.	Leu-9 to Thr-14,							•					
14254	14255		14256	14257	14258	14259	14260	14261	14262	14263			14264	14265	14266	14267			14268	14269	14270	14271											14272	14273
123 - 290	159 - 404		253 - 378	3 - 242	2 - 352	998 - 571	46 - 156	144 - 299	166 - 417	3 - 185			1 - 105	236 - 349	82 - 243	93 - 308			59 - 202	1 - 237	1 - 171	799 - 578								_			116-310	1 - 210
4502	4503		4504	4505	4506	4507	4508	4509	4510	4511			4512	4513	4514	4515			4516	4517	4518	4519							·				4520	4521
860521	660320		576857	577338	840215	860518	575752	860510	715324	720944			506352	719088	524799	575753			575758	953890	576804	666261							<del></del>				913687	766775
HNGIN28	HNGIO15		HNGIO77	HNGIP30	HNGIP39	HNGIP42	HNGIP72	HNGIQ28	HNGIQ43	HNGIQ48			HNGIQ66	HNGIR34	HNGIR92	HNGIS13			HNGIS30	HNGIT70	HNGIU55	HINGIU78											HNGIV01	HNGIV24

																															108725, 120700, 133171, 136836,
						8p23.1																									19p13.3
S0052: 1 and S0428: 1.	S0052: 2 and S0428: 1.	S0052: 1 and S0216: 1.	S0052: 2	80052: 2	S0052: 2	S0052: 2		AR061: 10, AR089: 5	T0042: 1, S0052: 1, H0521:	1 and L0439: 1.		S0052: 1 and S0428: 1.	S0052: 2 and H0402: 1.	S0052: 2	S0052: 2	S0052: 3, L0809: 1 and	L0789: 1.	S0052: 1 and S0216: 1.	S0052: 2	L0476: 1, S0052: 1 and	S0053: 1.	S0052: 1 and S0053: 1.	S0052: 2	S0052: 2		S0052: 2	50052.2	S0052: 2	S0052: 1 and S0478: 1	20026. 1 and 20160. 1.	S0052: 1 and S0428: 1.
Glu-19 to Thr-24, Thr-51 to Lys-56.	Lys-5 to Asn-10.	Gly-7 to Gln-12.				Gly-1 to Lys-11,	Gly-13 to Gly-25.	Lys-31 to Gly-37,	Pro-56 to Phe-65,	Leu-77 to Asp-83,	Pro-91 to Lys-97.	Thr-65 to Trp-80.	Ser-27 to Tyr-32.		Arg-15 to Asp-24.	Met-67 to Lys-72.				Arg-13 to Gly-18.	•	Pro-2 to Arg-7.		Val-2 to Gly-9,	Gly-11 to Gly-24.	Pro-9 to Leu-16,	Aid-24 to Oiy-02.		His22 to I en27	Pro-43 to Gly-64.	Ser-4 to Gly-10, Gly-36 to Asp-42,
14274	14275	14276	14277	14278	14279	14280		14281				14282	14283	14284	14285	14286		14287	14288	14289		14290	14291	14292		14293	14704	14795	14796		14297
190 - 357	131 - 577	63 - 290	37 - 171	162 - 1	3 - 149	1 - 162		3 - 530				35 - 334	261 - 356	186 - 305	218 - 436	147 - 371		763 - 927	157 - 306	257 - 436		203 - 445	58 - 285	183 - 416		2 - 211	1 - 132	1 - 93	375 - 569		24 - 371
4522	4523	4524	4525	4526	4527	4528		4529				4530	4531	4532	4533	4534		4535	4536	4537		4538	4539	4540		4541	4542	4543	4544	.	4545
016777	983088	764456	674660	707323	868065	740404		775229				792737	670962	733439	757599	668704		787570	666512	936011		724406	753060	723380		786924	739500	660312	774154		760397
HNGIV81	HNGIW70	HNGIW73	HNGIY22	HNGIY36	HNGIY56	09XIDNH		HNGIY79				HNGIY92	HNGIZ36	HNGIZ56	HNGIZ69	HNGIZ82		HNGJA15	HNGJA18	HNGJB34		HNGJB52	HNGJB68	HNGJC60		HNGJC66	HNGIC76	HNGJD15	HNGID61		HNGJD71

					Leu-81 to Thr-91.		145981, 147141.
					Pro-93 to Gly-99,		164953, 188070,
					Ser-108 to Ala-114.		600957, 601238,
							601846, 602216,
							602477
HNGJD76	670948	4546	20 - 259	14298		S0052: 2 and S0053: 1.	
HNGJE16	926199	4547	3 - 212	14299		H0341: 1 and S0052: 1.	
HNGJE33	795219	4548	134 - 286	14300		S0052: 1 and S0428: 1.	
HNGJE40	960003	4549	74 - 304	14301	Asn-1 to Gly-7,	H0265: 1 and S0052: 1.	
HNG1F56	660732	4550	222 - 374	14302	F10-21 10 Leu-20.	80052-2	
HNGJF26	666504	4551	2 - 241	14303	Leu-38 to Ala-43.	S0052: 2 S0052: 2	
HNGJF65	698487	4552	401 - 589	14304		S0052: 2 H0306: 1 and	
20 750 17	2000	7001	(00 - 10+	t 00t 1		L0790: 1.	
HNGJF73	683440	4553	217 - 408	14305		S0052: 2	
HNGJF79	775221	4554	1 - 156	14306		H0271: 1 and S0052: 1.	
HNGJG15	806039	4555	121 - 354	14307	Pro-44 to Leu-55,	S0052: 2	
					Arg-60 to Ser-66, Arg-69 to Trp-78.		
HNGJG37	708703	4556	6 - 146	14308	Ser-1 to His-6.	S0052: 2	
HNGJG72	262026	4557	53 - 163	14309	Thr-16 to Tyr-24, Glu-29 to Gln-34.	S0052: 1 and H0445: 1.	
HNGJG89	778294	4558	85 - 252	14310		80052: 2	
HNGJH09	415566	4559	39 - 179	14311		S0052: 1 and S0216: 1.	
	860378	9587	118 - 315	19339	Glu-52 to Lys-57.		
HNGJH11	860350	4560	1 - 222	14312	Gly-1 to Val-13, Ser-34 to Leu-39.	S0052: 3	
HNGJH35	952237	4561	3 - 167	14313	Ser-14 to Glu-20.	S0052: 1 and S0428: 1.	
HNGJH50	666843	4562	134 - 307	14314		80052: 3	
HNGJH96	953648	4563	1 - 177	14315		80052: 2	
HNGJI29	<i>L</i> 99069	4564	197 - 385	14316	Trp-1 to Asn-9.	80052: 2	
HNGJI35	707328	4565	2 - 223	14317	Glu-16 to Arg-29, Ser-41 to Gly-48.	S0052: 4	
HNGJI42	465160	4566	158 - 418	14318		80052: 2	
HNGJI54	465159	4567	1 - 381	14319	Glu-43 to Ala-49,	S0052: 3	

																							_			
		S0052: 2	S0052: 2	S0052: 3	S0052: 1. S0428: 1 and	L0599: 1.	S0052: 2	S0052: 2	\$0052:2	S0002: 1 and S0052: 1.	S0052: 2	S0052: 2	S0052: 2		1 100100 1	S0052: 1 and S0428: 1.	S0052: 3	S0052: 2	S0052: 2	S0052: 3 and H0444: 1.	\$0052:3	\$0052: 2		S0052: 2	L0639: 1, L0659: 1, L0517:	S0052: 2
Cys-57 to Ser-62,	Arg-79 to Thr-86.	Pro-25 to Arg-32, Arg-38 to Gly-49.	Ala-12 to Asn-17, Thr-23 to Gln-33.	Arg-7 to Pro-21, Pro-40 to Gln-47.	Thr-2 to Cvs-13.	Asp-24 to Gln-32.		Ala-2 to Thr-18,	145 £2 to com £7.	Glu-1 to Ser-9.		Cys-36 to Ser-41, Thr-48 to Arg-58.	Lys-3 to Val-9,	Cys-24 to Phe-30,	II. 04 / 4 0/	His-21 to Arg-26, Met-38 to Ala-47.	Gln-1 to Ile-9.	His-16 to Lys-48.		His-1 to Trp-12, Ser-29 to Ile-34.	Arg-2 to Gly-12.	Ser-1 to Ser-8,	Asn-44 to Ala-54.	Gly-1 to Ser-7, Pro-12 to Glu-20		Ser-47 to Asp-52.
		14320	14321	14322	14323		14324	14325	14326	14327	14328	14329	14330		14004	14331	14332	14333	14334	14335	14336	14337		14338	14339	14340
		48 - 308	94 - 357	221 - 376	1 - 285		124 - 53	76 - 222	2 - 163	132 - 227	3 - 83	1 - 174	14 - 223		900	09 - 398	238 - 101	122 - 355	87 - 290	191 - 319	2 - 265	177 - 359		1 - 369	1 - 264	164 - 439
		4568	4569	4570	4571		4572	4573	4574	4575	4576	4577	4578		0237	45/9	4580	4581	4582	4583	4584	4585		4586	4587	4588
		760393	772215	781213	597096		725702	615288	935548	9890/6	707327	663954	713810		201020	800190	730713	736080	739323	732737	772218	661977		681819	725295	462981
		HNGJI71	HNGJI77	HNGJI83	HNGJJ22		HNGJJ51	HNGJK04	HNGJK06	HNGJK12	HNGJK23	HNGJK29	HNGJK42		111/1/11/20	OCALDNIH	HNGJK54	HNGJK58	HNGJK71	HNGJK77	HNGJK89	HNGJL16		HNGJL26	HNGJL27	HNGJL60

HNGJL73	783518	4589	69 - 311	14341	Asn-1 to Leu-8.	S0052: 2		
HNGJL76	793537	4590	809 - 69	14342	Asp-36 to Arg-44.	S0052: 1. S0053: 1 and	19013.3-013.4	113900 126340
				!		L0361: 1.		126391, 130410,
								154/90, 1385/0,
								191044, 258501.
			_					600040, 600138, 602225, 602225
HNGJM20	964800	4591	2 - 157	14343		S0052: 2		
HNGJM35	707324	4592	3 - 116	14344	Arg-18 to Leu-25.	S0052: 2 and L0361: 1.		
HNGJM82	967328	4593	432 - 19	14345		S0134: 1, L0769: 1, L0794:		
						1, S0052: 1, S0428: 1, L0753:		
HNGJ010	964678	4594	140 - 301	14346	Gly-1 to Glu-6.	S0052; 2		
HNGJ035	707329	4595	2 - 403	14347	Arg-39 to Gly-49,	S0052: 2		
					Pro-51 to Thr-56.			
HNGJ045	717069	4596	322 - 408	14348		S0052: 1 and S0053: 1.		
HNGJ073	266899	4597	208 - 360	14349	Ser-28 to Ser-33,	H0318: 1 and S0052: 1.		
			•		Gly-39 to Thr-46.			
HNGJP03	860363	4598	95 - 376	14350	Cys-13 to Arg-22, Pro-29 to Lys-41.	S0052: 2		
HNGJP10	964668	4599	72 - 392	14351	Gly-12 to Lys-22, Asn-29 to Ser-34	S0052: 1 and S0428: 1.		
HNGJP80	766278	4600	118 - 429	14352	Pro-10 to Gln-15.	H0305: 1, S0052: 1 and		
Thiomas a	000	1007	ot c	11000		S0428: 1.		
HNGJQ14	881342	4601	2 - 3/0	14353		S0052: 1 and S0053: 1.		
HNGJ023	789764	4602	192 - 314	14354	Gly-12 to Pro-18.	S0052: 1 and S0216: 1.		
HNGJQ25	924652	4603	3 - 170	14355		S0052: 2		
HNGJQ35	707326	4604	146 - 388	14356	•	S0052: 2		
HNGJR01	916555	4605	203 - 373	14357		H0090: 1 and S0052: 1.		
HNGJS24	677235	4606	178 - 333	14358		S0052: 2		
HNGJS45	720746	4607	63 - 1	14359		S0052: 2		
HNGJS53	728258	4608	256 - 444	14360		S0052: 2		
HNGJS64	746606	4609	16 - 357	14361	Ser-2 to Arg-8,	S0052: 2		
					Gly-14 to Trp-24, Thr-28 to Gln-33.			

																																113900, 126340, 126391, 130410,
																																19q13.3-q13.4
		S0052: 2	S0052: 2	S0052: 1 and S0428: 1.		80052: 2	S0052: 2	S0052: 3 and H0521: 1.	S0052: 2	S0052: 2	S0052: 2	S0052: 2	S0052: 2		S0052: 1 and S0216: 1.	H0556: 1, S0428: 1, L0589:	1 and H0423: 1.	S0428: 2		AR061: 4, AR089: 4	S0114: 1, H0376: 1, S0428:	1 and L0748: 1.	S0428: 1, S0053: 1 and	S0216: 1.	H0087: 1 and S0428: 1.			S0428: 2	H0271: 1, S0052: 1 and S0428: 1.	S0428: 2		S0428: 2, S0053: 1 and S0216: 1.
Gly-40 to Phe-58,	Gly-80 to Arg-94.	His-1 to Asp-6, 11e-67 to Tro-72.	Asn-5 to Ser-12.	Thr-28 to Leu-33,	Trp-61 to Pro-67.		Thr-8 to Asp-15.				Glu-21 to Asn-27.	Gln-28 to Gly-42.	Ser-5 to Val-10,	Ala-27 to Gly-33.		Arg-1 to Ser-6.		Gly-2 to Pro-17,	Pro-31 to Gly-48.	Trp-1 to Gln-8,	Thr-16 to Trp-22,	Ser-67 to Ser-75.	Lys-13 to Thr-18,	Ser-24 to Ser-29.	Arg-6 to Gly-21,	Thr-34 to Pro-39,	Fro-45 to Fro-50.	Met-40 to Ser-45.		Arg-6 to Gly-12,	Arg-36 to Arg-47.	Lys-56 to Ser-62.
		14362	14363	14364		14365	14366	14367	14368	14369	14370	14371	14372		14373	14374		14375		14376			14377		14378			14379	14380	14381		14382
		3 - 221	122 - 352	1 - 288		158 - 343	120 - 254	651 - 457	272 - 412	2 - 109	166 - 375	18 - 224	205 - 378		144 - 1	97 - 345		3 - 311		89 - 445			98 - 322		63 - 305		0.00		164 - 364	297 - 497		2 - 361
		4610	4611	4612		4613	4614	4615	4616	4617	4618	4619	4620		4621	4622		4623		4624			4625		4626	-	1000	4627	4628	4629		4630
		920755	888329	775502		792338	953418	708122	724416	725703	860347	615283	964672		790213	876593		966119		944424			971110		791760		27.000	860343	793414	860320		952221
		HNGJS91	HNGJT36	HNGJT72		HINGJT93	HNGJT95	HNGJU36	HNGJU50	HNGJU51	HNGJU78	HNGJV04	HNGJV10		HNGJV91	HNGKA62		HNGKB11		HNGKB25			HNGKB78		HNGKB93		TRICITEE	HINGKUSS	HNGKD94	HNGKE05		HNGKE07

134790, 138570, 160900, 173850,	191044, 258501, 600040, 600138, 602225, 602225																		109690, 109690,	131400, 138491,	138491, 138491,	154500, 180071,	181460, 222600,	222600, 222600,	234000, 272750,	600807, 601411,	601596, 602089			
																			5q32-q33	1										
		S0428: 2	S0428: 2 and S0052: 1.	S0428:·2	S0428: 2 and S0052: 1.	H0255: 1 and S0428: 1.	S0428: 2		S0428: 2 and S0052: 1.	S0428: 2	Park a de la companya			S0428: 1 and S0216: 1.			S0428: 2 and S0052: 1.	S0052: 1 and S0428: 1.	S0428: 2									S0428: 2	S0428: 2	H0255: 1 and S0428: 1.
		Pro-32 to Gln-38, Pro-56 to Leu-66.			Glu-29 to Phe-35.	Gly-1 to Pro-7.	Pro-33 to Pro-49,	Pro-56 to Pro-63.		His-5 to Gly-15,	Phe-22 to Arg-28,	Ser-45 to Gly-54,	Ser-64 to Lys-71.	Lys-41 to Asn-46,	Lys-55 to Thr-61,	Ser-77 to Thr-84.	Thr-6 to Gly-17.		Phe-33 to Gly-41,	Glu-58 to Lys-63,	Arg-78 to Ser-83,	Pro-92 to Leu-101.						Ala-24 to Ser-30, Gln-61 to Gln-68.		Leu-26 to Arg-32.
		14383	14384	14385	14386	14387	14388		14389	14390				14391			14392	14393	14394									14395	14396	14397
		304 - 579	251 - 631	268 - 420	137 - 274	3 - 311	59 - 352		6 - 185	1 - 243				287 - 640			57 - 233	318 - 1	20 - 328						. •		- 1	3 - 206	2 - 169	42 - 515
		4631	4632	4633	4634	4635	4636		4637	4638				4639			4640	4641	4642									4643	4644	4645
		812714	860312	786257	789685	791623	915247		965047	780453				958487			860317	926987	860205									784854	787378	791671
		HNGKE52	HNGKE73	HNGKE89	HNGKE91	HNGKE93	HNGKF01		HNGKF11	HNGKF83				HNGKG43			HNGKG61	HNGKH04	HNGKI30									HNGKI36	HNGKI90	HNGKI93

																											:
S0428: 1 and S0053: 1.	S0428: 2, H0264: 1, S0052: 1 and S0053: 1.	<b>-</b>	S0428: 2	S0428: 2	·S0428: 2	S0052: 1 and S0428: 1.	H0069: 1 and S0428: 1.	S0052: 1 and S0428: 1.				S0428: 2	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2 and L0750: 1.	S0428: 2		S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	H0271: 1, S0052: 1 and	S0428: 1.	S0428: 2, S0052: 1 and	L0731: 1.	AR061: 7, AR089: 2 H0318: 1, S0144: 1 and			
lie-1 to Thr-26, Arg-36 to Ala-42, Glu-61 to Lys-66, Arg-76 to Arg-81, Val-104 to Ile-117, Gln-119 to Gly-127.	Glu-24 to Pro-31.	Ser-26 to His-31, Ala-65 to Glu-71.	Asp-1 to Arg-7.	Pro-72 to Arg-79.		Gln-5 to Pro-10.				Gln-1 to Lys-13.	Phe-14 to Gln-22,	Gly-37 to Cys-43,	Met-47 to Lys-53,	Glu-56 to Ser-62.	Pro-23 to Cys-34.		Pro-2 to Gly-20.	Pro-14 to Gly-23.	Thr-1 to Trp-6,	Pro-80 to Ser-88.		Pro-1 to Asn-6.	Glu-1 to Ser-13,	Glu-24 to Gly-30.	Ser-11 to Trp-21,	Arg-74 to Glu-80.	Asp-73 to Gly-79, Val-107 to Ile-114,
14398	14399	19340	14400	14401	14402	14403	14404	14405	14406	14407	14408				14409	14410	14411	14412	14413		14414	14415	14416		14417		14418
55 - 444	57 - 356	426 - 184	1 - 315	49 - 285	123 - 1	3 - 203	148 - 372	175 - 369	159 - 374	149 - 289	65 - 280				1 - 153	346 - 579	63 - 257	97 - 210	2-313		181 - 396	163 - 468	320 - 472		199 - 465		234 - 689
4646	4647	9288	4648	4649	4650	4651	4652	4653	4654	4655	4656				4657	4658	4659	4660	4661		4662	4663	4664		4665		4666
915231	809083	974222	883072	806051	660996	860305	974356	958311	860302	926948	915218				860206	915288	775300	830026	860260		835972	860263	922969		958312		839088
HNGKJ01	HNGKJ38		HNGKJ51	HNGKK35	HNGK011	HNGKP29	HNGKS06	HNGKT08	HNGKT69	HNGKU04	HNGKV01				HNGLA54	HNGLC01	HNGLC46	HNGLD34	HNGLE25		HNGLE52	HNGLE74	HNGLF03	•	HNGLF08		HNGLG06

S0428: 1.	S0052: 1 and S0428: 1.	S0052: 3 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2	S0052: 1 and S0428: 1.	S0428: 2	S0428: 2	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 1 and S0216: 1.		H0170-1 and S0428-1	A DOCT OF A DOCTO	ARU51: 29, ARU50: 25,	AR054: 17	S0428: 2		S0052: 1 and S0428: 1.	S0428: 3	S0428: 2	S0052: 1 and S0428: 1.	S0428: 2	S0052: 1 and S0428: 1.	S0428: 2 and L0748: 1.	S0052: 1 and S0428: 1.					50438.3	50428: 3	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.
Met-120 to Tyr-126.	Ser-9 to Ser-25.						Tyr-1 to Cys-9.			Lys-1 to Gly-10,	Met-12 to Gln-18,	Gh-79 to Trn-34		Gly-1 to Gly-8.			Pro-21 to Tyr-32.		Ser-12 to Glu-25.	Asp-1 to Tyr-8.		Gly-19 to Leu-30.	Arg-6 to Ile-11.	Met-11 to Arg-16.	Ser-2 to Trp-8,	Arg-15 to Ser-25,	Pro-41 to Glu-46,	Gln-51 to Asn-57,	Gly-106 to Ala-113,	Pho 28 to Glv 40	FIE-50 to GIU-48.	Thr-29 to Ser-41, Lys-54 to Cys-67.	
	14419	14420	14421	14422	14423	14424	14425	14426	14427	14428		14479	14420	14430			19341	14431	14432	14433	14434	14435	14436	14437	14438					14420	14439	14440	14441
	280 - 453	105 - 404	332 - 496	78 - 323	23 - 238	301 - 522	234 - 491	220 - 420	35 - 190	330 - 584		139 - 288	724 200	/ 34 - 488			157 - 456	46 - 336	140 - 421	36 - 122	13 - 285	49 - 213	505 - 741	138 - 527	73 - 666					073 121	424 - 079	3 - 347	259 - 405
	4667	4668	4669	4670	4671	4672	4673	4674	4675	4676		4677	4670	40/8			9589	4679	4680	4681	4682	4683	4684	4685	4686					1687	4007	4688	4689
	785570	954140	954943	806045	785685	795280	795225	923028	966105	859922		789193	120210	8422/4			873128	860253	789743	919222	963504	779223	775504	780484	924891					835586	000000	789707	784860
	HNGLH72	HNGLH82	HNGLJ04	HNGLJ20	HNGLK13	HNGLK65	HNGLK90	HNGLL03	HNGLL11	HNGLL24		HNGLT31	INCI I 41	TINGEL41				HNGLL67	HNGLL91	HNGLM06	HNGL010	HNGLO70	HNGLO80	HNGLO86	HNGL092					HNGI B30	CUTONIII	HNGLR91	HNGLS86

						~																						
H0589: 1 and S0428: 1.	S0428; 2	S0428: 2	S0428: 2 and S0052: 1.	S0428: 2	S0052: 1 and S0428: 1.		H0402: 1, S0428: 1 and	L0439: 1.	S0428: 2	S0428: 2		S0428: 2	S0052: 1 and S0428: 1.	S0428: 2	S0428: 2 and H0023: 1.	S0428: 2	S0428: 2		S0428: 2	S0428: 2	S0114: 1 and S0428: 1.	S0052: 1 and S0428: 1.		S0428: 2	AR089: 15, AR061: 7 S0428: 2	S0428: 2		S0428: 2
		Pro-31 to Gly-36, I vs-43 to I vs-49		Pro-24 to Gln-29.	Ala-5 to Arg-13,	Arg-31 to Gly-48, Glv-52 to Thr-58.	Asn-1 to Tyr-6.			Pro-41 to Leu-47,	1111-20 to Ata-33.	Ala-12 to Gln-17, Pro-59 to Arg-67.	Gln-26 to Lys-36.			Lys-4 to Gly-21, Glu-57 to Thr-62.	Pro-34 to Asp-46.	Arg-52 to Lys-57.			Pro-31 to Leu-45.	Arg-1 to Met-6,	Phe-35 to Leu-40, Pro-55 to Arg-66,	5)	Ala-63 to Trp-69.	Ala-1 to Glu-19, Gln-25 to Trp-36,	Met-53 to Gly-66.	Ser-35 to Pro-41.
14442	14443	14444	14445	14446	14447		14448		14449	14450		14451	14452	14453	14454	14455	14456		14457	14458	14459	14460	-	14461	14462	14463		14464
377 - 547	3 - 203	251 - 424	336 - 94	33 - 317	263 - 541		11 - 454		121 - 372	36 - 338		16 - 252	353 - 592	1 - 159	226-2	66 - 287	147 - 389		111 - 254	18 - 218	335 - 487	232 - 429		284 - 156	107 - 463	214 - 453		86 - 433
4690	4691	4692	4693	4694	4695		4696		4697	4698		4699	4700	4701	4702	4703	4704		4705	4706	4707	4708		4709	4710	4711		4712
958777	934371	915306	860244	860166	773752		860243		923041	927026		793483	860242	966114	795236	772974	966091		934318	958361	775503	791725		923011	786340	952224		860240
HNGLT67	HNGLX63	HNGMA01	HNGMA49	HNGMB26	HNGMB33		HNGMC51		HNGMD03	HNGMD04		HNGME93	HNGMF04	HNGMF11	HNGMF46	HNGMF79	HNGMF94		HNGMG06	HNGMG08	HNGMH80	HNGMH93		HNGMJ04	HNGMJ89	HNGML07		HNGML53

			1	Т		_	Г	T						$\top$	T-	$\overline{}$	Т	Т	Τ_		I											
																								!								
																								!		,						
S0428: 2			H0250: 2 and S0428: 1.	H0271: 1 and S0428: 1.		S0428: 2	S0428: 2	S0052: 1 and S0428: 1.		S0428: 2, H0610: 1, H0271:	1 and S0052: 1.	S0428: 2		S0052: 1 and S0428: 1.	S0428: 2	S0428: 2	S0428: 2	H0300: 2 and S0428: 1.	S0428: 2, 1,0517: 1 and	S0052: 1.	H0556: 1 and S0428: 1.				S0428: 2	S0052: 1, S0428: 1 and	S0053: 1.	S0428: 2		S0052: 2 and S0428: 1.		
Arg-8 to Ser-13,	Ala-31 to Cys-37,	Thr-76 to Glu-83, Leu-93 to Arg-99	Gly-11 to Asp-33.	Asn-10 to Arg-22,	Asn-91 to Ser-96.	Glu-1 to Leu-11.	Thr-1 to Ser-7.	Asn-8 to Arg-17,	Asn-35 to Tyr-40.	Lys-13 to Trp-23,	Arg-36 to Lys-41.	Pro-31 to Asp-58,	Ser-77 to Gln-87,	Ser-1 to Leu-6.	Glu-1 to Ser-20.	Phe-1 to Thr-10.	Val-1 to Gly-6.		Leu-49 to Arg-54		Asn-1 to Pro-21,	Ser-33 to Trp-42,	Thr-52 to Lys-57,	Pro-69 to Trp-89.	Ser-27 to Gln-38.			Arg-45 to Glu-50,	Thr-62 to Asn-72.	Pro-9 to Ser-14,	Ser-46 to Ala-53,	Ala-69 to Ala-86, Arg-96 to Pro-108.
14465			14466	14467		14468	14469	14470		14471		14472		14473	14474	14475	14476	14477	14478	•	14479				14480	14481		14482		14483		
121 - 501			2 - 220	138 - 437		250 - 519	176 - 595	226 - 618		2 - 268		3 - 380		79 - 309	1 - 135	9 - 83	136 - 561	1 - 237	333 - 506		117 - 389				214 - 492	146 - 313		35 - 319		2 - 370		
4713			4714	4715		4716	4717	4718		4719		4720		4721	4722	4723	4724	4725	4726		4727	-			4728	4729		4730		4731		
860201			933358	806036		806000	860231	790852		786255		835612		789680	779201	915258	963425	861967	847818		922831				926985	781913		891098		893899		
HNGMM51			HNGMM54	HNGMM87		HNGMV73	HNGMW52	HNGMW92		HNGMX80		HNGMX87		HNGMX91	HNGNA23	HNGNB01	HNGNE65	HNGNF40	HNGNG37		HNGNH03				HNGNI04	HNGNI52		HNGNI75		HNGNI94		

																										,					
H0057: 1 and S0428: 1.	S0428: 2	S0052: 1 and S0428: 1.	S0428: 2	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2				-	H0486: 1 and S0428: 1.	H0402: 1 and S0428: 1.	S0428; 2	S0428: 2	S0428; 2 and S0052; 1.	S0216: 2 and S0428: 1.	S0428: 3 and L0377: 1.	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2	S0428: 2	S0428: 3	S0428: 1 and S0053: 1.	S0428: 1 and S0216: 1.		H0402: 1, S0428: 1 and	S0053: 1:	H0580. 1 and C0428. 1.	110250. 1 and 30426. 1.	S0428: 2	S0052: 1 and S0428: 1.
Glu-37 to Arg-42.	Ala-39 to Arg-46.					Pro-40 to Arg-54,	Pro-57 to Gly-72,	Glu-74 to Ala-81,	Pro-89 to His-96,	Leu-99 to Glu-104.	Arg-22 to Glu-36.			Glu-48 to Cys-54.				Leu-39 to Gly-44.		Glu-18 to Glu-25, Ser-36 to Val-42	Asp-73 to Phe-80.		Ser-10 to Leu-19.	Gly-1 to Gly-9,	Thr-57 to Thr-71, Thr-77 to Ser-82.			Pro-7 to Arg-12	110-7 to 1115-12:	Lys-45 to 1 nr-58, Asp-77 to Arg-88.	His-5 to Asn-16,
14484	14485	14486	14487	14488	14489	14490					14491	14492	14493	14494	14495	14496	14497	14498	14499	14500	14501	14502	14503	14504		14505	14506	14507	14500	14508	14509
67 - 243	269 - 475	229 - 387	575 - 733	40 - 210	283 - 465	39 - 389					116 - 253	3 - 248	321 - 539	140 - 346	261 - 398	110 - 280	88 - 399	12 - 224	285 - 449	1 - 144	43 - 282	192 - 563	140 - 367	1 - 333		417 - 725	1-255	337 - 510	156 103		85 - 339
4732	4733	4734	4735	4736	4737	4738					4739	4740	4741	4742	4743	4744	4745	4746	4747	4748	4749	4750	4751	4752		4753	4754	4755	7756	06/4	4757
841902	860155	926870	963470	788971	787388	908167					860199	783747	806018	806042	860158	790926	839887	780996	779154	791700	790805	860143	796548	782188		783717	971178	958943	806013	CIDODO	921433
HNGNM24	HNGNO03	HNGNR04	HNGNS10	HNGNS58	HNGNS90	HNGNV80					HNGNW04	HNGNW85	HNGNX37	HNGNX65	HNGNZ01	HNGNZ38	HNGNZ91	HNG0A11	HNGOA82	HNGOB95	HNGOD68	HNGOE64	HNGOF50	HNGOF84		HNGOF85	HNGOG49	HNGOH42	HNGOI86	UINGOION	HNG0J13

							2:																									
	S0428: 2	S0428: 2	S0116: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2	L0521: 2, H0305: 1, S0002:	1, S0428: 1, L0758: 1 and	L0759: 1.	S0134: 1 and S0428: 1.	S0428: 2	S0052: 2 and S0428: 1.	S0428: 2		S0428: 2	H0457: 1 and S0428: 1.	S0052: 1 and S0428: 1.	S0428: 2 and S0053: 1.	S0428: 2 and L0766: 1.	H0444: 2 and S0428: 1.					S0428: 2	S0052: 1 and S0428: 1.	S0428: 2	S0428: 2	S0428: 2	S0428: 2	S0428: 1 and S0216: 1.	S0053: 2
Tyr-61 to Gly-71.		Ser-14 to Arg-25.	Pro-22 to Gln-28.				Phe-4 to Thr-10,	Pro-23 to Ser-30.		Pro-8 to Ser-28.	Phe-33 to Leu-39.		Gln-11 to His-23,	Glu-25 to Gly-41.	Thr-19 to Cys-27, Val-33 to Gly-39.	Ser-23 to Ala-30, Ala-44 to Ala-54.			Glu-17 to Gly-23.	Pro-1 to Leu-7,	Lys-14 to Trp-22,	Leu-24 to Gly-30,	Ser-47 to Gly-53,	Gln-71 to Leu-86.		Ala-9 to Trp-16.	Ser-17 to Ser-25.	Lys-1 to Asp-7.		Gln-39 to Cys-45.		Arg-16 to Gly-23.
	14510	14511	14512	14513	14514	14515	14516			14517	14518	14519	14520	,	14521	14522	14523	14524	14525	14526					14527	14528	14529	14530	14531	14532	14533	14534
	2 - 304	108 - 242	203 - 442	3 - 143	3 - 155	230 - 406	289 - 438			69 - 314	53 - 286	2 - 187	2 - 310		162 - 359	3 - 386	118 - 246	174 - 353	461 - 655	250 - 507					136 - 288	177 - 350	105 - 413	331 - 588	119 - 475	3 - 140	3 - 239	2 - 145
	4758	4759	4760	4761	4762	4763	4764			4765	4766	4767	4768		4769	4770	4771	4772	4773	4774					4775	4776	4777	4778	4779	4780	4781	4782
	860193	789689	784813	860185	888856	926972	963483			860176	922963	921416	676976		915210	915012	880777	969683	947384	855983		_			805997	959740	913782	954997	860145	949269	963469	860141
	HNGOJ64	HNGOK59	HNGOK86	HNGOL14	HNG0022	HNGOP04	HNGOP10			HNGOS22	HNGOV03	HNGOV65	HNGOW13		HNGOY01	HNGOY10	HNGOZ17	HNGPH12	HNGPI08	HNGPJ23		_			HNGPJ51	HNGPL91	HNGPN01	HNGPN46	HNGPP61	HNGPR03	HNGPS10	HNHAB29

																											-	
S0053: 2	80053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	L0766: 2, S0053: 2 and	L0758: 1.	S0053: 2	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 1 and H0423: 1.	S0053: 2	00052.7	30033: 2			S0053: 2	S0053: 2 and S0216: 1.	S0053: 2	S0053: 2	H0271: 1 and S0053: 1.	S0053: 2		
Gly-1 to Gly-9, Glu-24 to Gly-35.		Gly-10 to Trp-22, Pro-25 to Cys-32,	130 00 00 00.		Tyr-34 to Thr-39.	Lys-1 to Trp-10.	Gln-37 to Asn-42,	Arg-47 to Lys-67.						Lys-19 to Gln-25, Leu-68 to Gly-73.			Cor 1 to Dhe 10	Ser-1 to Frie-10, Leu-14 to Ile-19,	Ser-41 to Ser-47,	Ala-61 to Gly-66.	Thr-19 to Ser-27.	Arg-1 to Arg-7, Ala-16 to Ser-24.	Arg-2 to Gly-11.			Thr-42 to His-47,	Leu-55 to Trp-60,	Thr-75 to His-83, Pro-85 to Glu-96.
14535	14536	14537	14538	14539	14540	14541	14542		14543	14544	14545	14546	14547	14548	14549	14550	17551	14331			14552	14553	14554	14555	14556	14557		
3 - 149	7 - 135	22 - 180	10 - 174	76 - 231	140 - 388	89 - 235	81 - 377		2 - 58	85 - 165	274 - 417	25 - 219	2 - 139	240 - 1	93 - 230	56 - 190	1 240	047 - 1			241 - 399	66 - 272	2 - 286	82 - 240	135 - 302	24 - 374		
4783	4784	4785	4786	4787	4788	4789	4790		4791	4792	4793	4794	4795	4796	4797	4798	4700	4/33			4800	4801	4802	4803	4804	4805		
527921	527971	527815	725898	527809	860118	527806	899296		860128	527572	703576	574391	574384	515480	693318	724404	574387	7,4307	-		577334	574305	959771	721688	574310	860119		-
HNHAB93	HNHAF77	HNHAG50	HNHAG51	HNHAG64	HNHAH38	HNHAH84	HNHAI11		HNHAI15	HNHAI68	HNHAJ59	HNHAK83	HNHAP79	HNHAW75	HNHBC30	HNHBE19	HNHRH62	70110111111			HNHBH72	HNHBK22	HNHBK59	HNHBK80	HNHBM63	HNHBM66		

S0052: 1, S0428: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2		H0650: 1, S0428: 1 and	S0053: 1.	S0053: 2	S0053: 3	<b>.</b>	80053: 2		80053: 2	S0053: 2			S0053: 2	S0053: 3	80053: 2	S0053: 2		S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.	80053: 3	S0053: 2		S0053: 2	S0053: 2	80053: 2	S0053: 2	S0053: 2
Tyr-8 to Ser-16.		Glu-22 to Val-33.			Thr-1 to Lys-6,	Gly-44 to Gly-51.	Val-23 to Asn-43,	Ser-91 to Gln-107.	Lys-21 to Phe-27.	Thr-14 to Met-26.	Leu-12 to Ser-18.	Thr-1 to Leu-8,	Thr-50 to Lys-57.		Lys-8 to Arg-13,	He-24 to Tyr-29,	Arg-49 to Arg-60.	Thr-1 to Leu-6.	Glu-8 to Leu-16.		Leu-1 to Lys-8,	Arg-19 to Cys-29.			Pro-7 to Ala-12.	His-21 to Asp-38,	Glu-41 to Ile-53.		Gly-15 to His-20.		Ser-4 to Gly-12.	Arg-1 to Asn-13, Pro-35 to Ala-41.
14558	14559	14560	14561	14562	14563		14564		14565	14566	19342	14567		14568	14569			14570	14571	14572	14573		14574	14575	14576	14577		14578	14579	14580	14581	14582
460 - 666	2 - 151	109 - 237	14 - 175	57 - 173	92 - 328		493 - 963		129 - 257	138 - 332	246 - 401	3 - 338		268 - 89	185 - 394			62 - 232	12 - 254	71 - 229	85 - 219		28 - 210	213 - 389	2 - 187	94 - 492		152 - 349	143 - 274	102 - 359	100 - 387	3-311
4806	4807	4808	4809	4810	4811		4812		4813	4814	9590	4815		4816	4817			4818	4819	4820	4821		4822	4823	4824	4825	, 60,	4826	4827	4828	4829	4830
793416	868059	526746	574090	953850	574048		925693		998699	574030	723352	574139		597123	577193			765815	753550	757745	574026		936012	774280	964712	694401	0.00	924873	577343	574309	574028	679154
HNHBO20	HNHBO71	HNHBO83	HNHBQ53	HNHBS07	HNHBS23		HNHBS38		HNHBU20	HNHBU21		HNHBU37		HNHBU79	HNHBU82			HNHBU91	HNHBU92	HNHBU93	HNHBV55		HNHBY06	HNHBY45	HNHBY60	HNHBY83	COLUMN TI	HNHBZ03	HNHCC42	HNHCD63	HNHCE68	HNHCJ25

																				,								
S0053: 2	S0053: 2 and L0789: 1.	S0053: 2	S0053: 1 and S0216: 1.	S0053: 1 and H0436: 1.	AR050: 182, AR054: 144,	AR051: 129	H0060: 1, S0428: 1 and	50053: 1.	S0053: 2	S0053: 2		S0052: 1 and S0053: 1.	S0053: 2	S0053: 2	S0052: 2 and S0053: 1.				S0053: 2	S0053: 2	S0428: 1 and S0053: 1.	S0114: 1 and S0053: 1	S0053. 2	S0053: 2	S0428: 1, S0053: 1, L0748:	S0053: 2	H0457: 3. H0305: 1. H0589.	1 and S0053: 1.
	Lys-14 to Ala-19, Ser-27 to Ser-34.	Lys-1 to Ala-11, Pro-19 to Lys-28, Ser-36 to Trp-41.	Ser-13 to Cys-23.	Lys-12 to Arg-20.	Leu-52 to Ser-60,	Gln-63 to Leu-68.			Gly-1 to Leu-11.	Ala-1 to Glu-9,	Ser-14 to Leu-19, Gly-25 to Leu-41.			Val-5 to Gln-14.	Ser-11 to Ala-24,	Glu-30 to Lys-37,	Cys-45 to Gly-54,	Inr-101 to Ser-112.		Pro-1 to Lys-6.	Phe-46 to Pro-54,		Leu-3 to Are-9	0			Met-34 to Glv-43.	Val-56 to Arg-62, Glu-85 to Gly-90.
14583	14584	14585	14586	14587	14588				14589	14590		14591	14592	14593	14594				14595	14596	14597	14598	14599	14600	14601	14602	14603	
3 - 182	1 - 129	65 - 250	79 - 198	305 - 427	3 - 257				1 - 225	50 - 277		9 - 293	62 - 193	64 - 198	26 - 361				61 - 246	2 - 172	284 - 586	197 - 373	3 - 194	1 - 240	3 - 263	32 - 130	307 - 666	
4831	4832	4833	4834	4835	4836				4837	4838		4839	4840	4841	4842			0,0	4843	4844	4845	4846	4847	4848	4849	4850	4851	
860112	574084	753558	760565	786033	780527				574082	719476		573010	577186	574337	860641				574147	666844	934307	866950	506696	574341	757410	574394	850918	
HNHCJ35	HNHCJ39	HNHCJ68	HNHCJ71	HNHCJ80	HNHCL20			7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	HNHCL38	HNHCL47		HNHCM80	HNHCN70	HNHCO27	HNHCO48			1000mar	HNHCO64	HNHCP18	HNHCP22	HNHCP37	HNHCP78	HNHCP88	HNHCQ70	HNHCU18	HNHCU42	

					ε,																												
S0053: 2	S0053: 1, S0216: 1 and L0439: 1.	H0650: 1 and S0053: 1.	S0053: 2	S0053: 1, S0216: 1 and	H0444: 1.			0 0000	50053: 2	S0053: 2	80053: 2			S0053: 2	80053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 1 and H0521: 1.	S0053: 2	0 0000	50053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 1 and S0216: 1.				S0053: 2	S0053: 1 and S0216: 1.
Gln-58 to Gly-65.	. 1	Ala-33 to Trp-39.	•	Ser-1 to Ala-10,	Leu-12 to Met-19,	Ser-37 to Ser-46,	Cys-52 to Leu-58,	FIU-/4 ID 1 y1-60.	GIn-15 to GIy-20.		Trp-7 to Gly-15,	Thr-17 to Gln-31,	Ser-40 to Ser-45.						Ser-1 to Asn-13.		Ser-26 to Cys-31.	Leu-13 to Ser-20,	Ciu-20 to Sci-33.		Arg-18 to Arg-23.		Gly-48 to Arg-54.	Arg-1 to Glu-6,	Gln-25 to Gly-30,	Pro-44 to Gly-56,	Gly-60 to Trp-65.	Gly-7 to Tyr-13.	
14604	14605	14606	14607	14608				14700	14009	14610	14611			14612	14613	14614	14615	14616	14617	14618	14619	14620	14601	14041	14622	14623	14624	14625				14626	14627
	221 - 343	18 - 176	204 - 332	149 - 394				7 150	3 - 132	1 - 90	260 - 442			76 - 303	146 - 379	1 - 72	145 - 300	22 - 189	192 - 434	13 - 105	132 - 260	8 - 130	171	01 - 1/4	977 - 7	49 - 210	29 - 193	116 - 397		<u>, , , , , , , , , , , , , , , , , , , </u>		201 - 326	1 - 285
4852	4853	4854	4855	4856				4067	4637	4858	4859			4860	4861	4862	4863	4864	4865	4866	4867	4868	1050	4007	48/0	4871	4872	4873				4874	4875
735005	766213	953881	574325	822988				036773	3/4330	574150	574323			676290	574329	800661	574304	708705	577339	734794	709277	968249	57/1305	27,4303	950040	860101	577701	789082				773592	924713
HNHCU57	HNHCV72	HNHCZ07	HNHCZ23	HNHDA07				UNITED A 70	INTIDA/9	HNHDA88	HNHDB11			HNHDB23	HNHDB46	HNHDB93	HNHDC26	HNHDC47	HNHDC83	HNHDC95	HNHDE38	HNHDF31	UNITIDEAR	THUMBIO	HINHIDHUO	HNHDH60	HNHDL62	HNHDL90				HNHDL94	HNHDM03

S0053: 2	S0053: 2	80053: 2	S0053: 2	S0052: 1 and S0053: 1.	S0053: 4	S0053: 1 and S0216: 1.	H0486: 1 and S0053: 1.		80053: 3	H0264: 1 and S0053: 1.		80053: 2	S0053: 3	S0053: 2	S0053: 2	S0053: 1 and H0445: 1.	80053: 2	50053.7	30033.2	S0053: 2	S0053: 3	S0053: 2	S0053: 2	H0271: 1 and S0053: 1.	AR054: 9, AR051: 4,	AR050: 2	S0053: 4	S0052: 1 and S0053: 1.	H0580: 1 and S0053: 1.	S0053: 2		S0053: 2
His-27 to Lys-38.	Cys-8 to Trp-19.	Asn-29 to Ser-35.			Gly-17 to Gly-23.		Arg-8 to Gln-14,	Lys-19 to Trp-38.	Ile-1 to Val-10.	Lys-1 to Asn-16,	Lys-18 to Cys-28.	Gln-1 to Trp-9.	Leu-24 to Arg-29.				Asp-7 to Pro-14,	(31) 16 to Ang 24	Olu-10 to Alg-54.	Arg-6 to Tyr-11, Asp-19 to Arg-26.	Tyr-39 to Asn-48.							Gln-1 to Phe-16.	Pro-64 to Trp-76.	Ser-1 to Asp-8,	Pro-46 to Asp-51, Gly-84 to Pro-92.	His-1 to Asn-7.
14628	14629	14630	14631	14632	14633	14634	14635		14636	14637		14638	14639	14640	14641	14642	14643	11611	1+0++	14645	14646	14647	14648	14649	14650			14651	14652	14653		14654
93 - 254	33 - 281	263 - 436	2 - 187	178 - 273	241 - 750	172 - 354	332 - 496		132 - 293	1 - 126		2 - 151	322 - 507	148 - 258	143 - 400	37 - 231	1 - 189	25 240	047 - 67	51 - 230	70 - 213	1 - 189	184 - 348	159 - 335	2 - 397			91 - 258	75 - 407	5 - 442		3 - 209
4876	4877	4878	4879	4880	4881	4882	4883		4884	4885		4886	4887	4888	4889	4890	4891	4807	4072	4893	4894	4895	4896	4897	4898			4899	4900	4901		4902
711352	724550	506621	573388	735007	826658	746093	967334		573328	707334		704560	577256	573357	496246	923817	368082	085589	000000	575480	683585	573347	573349	917004	887158			574455	728871	717796		506622
HNHDM40	HNHDM50	HNHDM74	HNHDN27	HNHDN79	HNHDP04	HNHDP29	HNHDQ11		HNHDQ17	HNHDQ35		HNHDQ39	HNHDQ56	HNHDQ65	HNHDQ71	HNHDQ93	HNHDR10	HNHDROS	TIMINITO	HNHDR71	HNHDS27	HNHDS83	HNHDS88	HNHDT01	HNHDT28			HNHDT42	HNHDT54	HNHDU83		HNHDV50

																				•													
S0053: 2	S0053: 2, S0052: 1 and	S0428: 1.	S0053: 1 and S0216: 1.	S0053: 2	80053: 2	H0305: 1, L0761: 1, L0791:	1 and S0053: 1.	S0052: 2 and S0053: 1.		S0053: 2	AR061: 8, AR089: 2	S0053: 2	S0053: 2		S0053: 2		S0053: 2 and L0774: 1.	90053.7	2,0000	H0581: 1 and S0053: 1.	S0052: 1 and S0053: 1.	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2		S0053: 2	S0053: 2		S0053: 2 and H0271: 1.			S0053: 1 and S0216: 1.	S0053: 2
Ser-21 to Gln-35.	Leu-13 to Trp-25.		His-7 to Ser-12.	His-1 to Ser-6.	Gly-11 to Met-16.	Asn-1 to Leu-20.		Glu-1 to Gly-6,	Val-40 to Phe-47.		Ser-25 to Gly-33,	Ser-43 to Trp-52.	Gly-1 to Asn-6,	Pro-19 to Leu-28.	His-1 to Pro-7,	Ser-44 to Thr-50.	Trp-1 to His-6,	204-20 to 11p-51.		Leu-1 to Thr-14, Phe-30 to Phe-40.				Tyr-34 to Ser-40,	Arg-46 to Arg-56.		Glu-24 to Gly-30,	Ser-38 to Gly-47.	Ala-3 to Ser-8,	Pro-24 to Gly-35,	GIY-51 to 1 nr-60.	Pro-7 to Met-12, Gln-22 to Ser-28.	Cys-2 to Asn-8.
14655	14656		14657	14658	14659	14660		14661		14662	14663		14664		14665		14666	14667	1001	14668	14669	14670	14671	14672		14673	14674		14675			14676	14677
3 - 242	1 - 285		98 - 298	3 - 119	120 - 242	19 - 123		142 - 282		2 - 175	1 - 546		1 - 255		3 - 200		96 - 431	77 - 182	70.	110 - 331		3 - 179	1 - 237	3 - 182			112 - 267		68 - 418			1 - 291	188 - 340
4903	4904	2007	4905	4906	4907	4908		4906		4910	4911		4912		4913		4914	4915		4916	4917	4918	4919	4920		4921	4922		4923			4924	4925
750262	723189	10001	1/9354	615272	573329	582473		216776		924211	945708		795954		506738		419716	573346	200000	835893	574868	573327	796491	573339		412655	276507		277306			796463	920414
HNHDV84	HNHDW78	OOZACII GI	HNHDX80	HNHDX84	HNHDY18	HNHDY37		HNHDY45		HNHDY50	HNHDY54		HNHDY83		HNHDZ14		HNHDZ26	HNHDZ69	70 1 11111111	HNHEA06	HNHEA21	HNHEA40	HNHEA96	HNHEB47		HNHEB88	HNHEC40		HNHEC51			HNHEC96	HNHED02

S0053: 1 and H0436: 1.	S0053: 2				S0053: 2			S0053: 2	S0053: 2	S0053: 2	S0053: 2		S0053: 2	S0053: 2			S0053: 2	AR050: 77, AR051: 70,	AR054: 67	S0053: 2	S0053: 2			S0053: 2	S0212: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2			H0073: 1 and S0053: 1.	S0053: 2	S0053: 2
Thr-5 to Gly-13.	Pro-17 to Leu-25,	Gln-33 to Ser-41,	Ala-62 to Ser-71,	Ser-74 to Lys-79.	Pro-9 to His-15,	Lys-27 to Lys-34,	Lys-40 to Ile-55.		His-8 to Cys-40.		Asp-13 to Ala-19,	Thr-40 to Gly-46.		Pro-1 to Pro-6,	Gly-58 to Glu-63,	Gln-68 to Lys-77.	Lys-30 to Met-35.	Thr-1 to Thr-11,	Val-15 to Lys-26,	Lys-80 to Gly-87.	Glu-1 to Leu-7,	Ser-27 to Lys-32,	Glu-36 to Glu-42, Ala-44 to Are-53.			Ile-24 to Val-29.	Glu-27 to Gly-36.	Ile-29 to Ser-42,	Glu-66 to Ala-92.	Ala-12 to Cys-17,	Gln-1 to Arg-15.		Thr-11 to Thr-18,
14678	14679				14680			14681	14682	14683	14684		14685	14686			14687	14688			14689			14690	14691	14692	14693	14694		19343	14695	14696	14697
339 - 686	289 - 53	_			124 - 330			183 - 383	267 - 410	2 - 241	289 - 426		74 - 313	53 - 337			3 - 206	28 - 336			159 - 404			270 - 383	192 - 299	158 - 289	64 - 171	509 - 204		122 - 331	1 - 228	234 - 389	67 - 372
4926	4927				4928			4929	4930	4931	4932		4933	4934			4935	4936			4937			4938	4939	4940	4941	4942		9591	4943	4944	4945
682992	576541				576540			576512	576440	860073	576442		576820	916792			576419	586443			576426			576415	861181	506278	582732	490514		860064	578589	678114	860021
HINHED51	HNHED82				HNHED83			HNHEE25	HNHEE30	HNHEE38	HNHEE40		HNHEE49	HNHEF01			HNHEF73	HNHEG28			HINHEG32			HNHEG49	HNHEG68	HNHEG91	HNHEH04	HNHEH37			HNHEH41	HNHEH51	HNHEH52

	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 1, S0216: 1 and L0594: 1.	S0053: 1 and S0216: 1.	S0053: 3	~~~		S0053: 2	S0053: 2	S0053: 2	H0063: 1 and S0053: 1.		H0589: 1 and S0053: 1.	S0053: 2		S0114: 1 and S0053: 1.	S0053: 2		S0053: 2	S0053: 1 and H0521: 1.	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2 and H0589: 1.	H0421: 2 and S0053: 1.	S0053: 2	S0428: 1 and S0053: 1.	S0053: 2
Thr-31 to Glu-40.	Arg-1 to Arg-6, His-24 to Glu-32.				Glu-1 to Asp-13.	Tyr-1 to Phe-8, Gly-21 to His-34,	Gly-42 to Gly-52,	Gly-57 to Asn-64, Leu-81 to Pro-86.		Ser-1 to Cys-6.		Ala-24 to Glu-31,	Asn-39 to Gly-46.	Cys-17 to Ser-25.	Gly-1 to Leu-6,	Gly-40 to Arg-46, Cys-73 to Ser-80		Glu-4 to Thr-11,	Ile-35 to Asn-46.	Lys-26 to Asn-34.						Lys-17 to Gln-22.		Arg-38 to Lys-43.	
	14698	14699	14700	14701	14702	14703			14704	14705	14706	14707		14708	14709		14710	14711		14712	14713	14714	14715	14716	14717	14718	14719	14720	14721
	27 - 170	220 - 375	191 - 313	59 - 325	1 - 237	19 - 288			78 - 230	106 - 207	148 - 246	1 - 162		223 - 465	1 - 465		43 - 165	3-212		3-116	345 - 223	209 - 412	3 - 212	124 - 273	246 - 386	1 - 249	2 - 154	3 - 170	156 - 341
	4946	4947	4948	4949	4950	4951			4952	4953	4954	4955		4956	4957		4958	4959		4960	4961	4962	4963	4964	4965	4966	4967	4968	4969
	576517	923080	576549	953586	967265	576533			916556	716723	576535	964882		916790	576819		954548	576420		576418	713723	859830	576423	506281	576430	786930	950725	860047	576424
	HNHEH60	HNHEI06	HNHEI64	HNHEJ07	HNHEJ11	HNHEJ23			HNHEJ24	HNHEJ44	HNHEJ57	HNHEJ85		HNHEK01	HNHEK63		HNHEK79	HNHEK83		HNHEL09	HNHEL37	HNHEL42	HNHEL44	HNHEL53	HNHEL82	HNHEL94	HNHEM04	HNHEM34	HNHEM35

S0052: 2, S0216: 2 and S0053: 1.	H0264: 1 and S0053: 1.	S0053: 2	S0053: 2	H0264: 1, S0053: 1 and	L0600: 1.	S0053: 2	S0053: 2 and S0428: 1.	S0053: 2	H0556: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2		S0053: 2 and S0428: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2		S0053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2
	Leu-2 to Ser-20, Lys-50 to Phe-56.				4	Pro-25 to Pro-32.	Ala-28 to Gln-44.	His-10 to Thr-16.		His-15 to Gly-20, Ser-36 to Glu-47.	Thr-3 to Lys-9, Cys-50 to Arg-56.	Pro-1 to Cys-14,	Glu-40 to Ser-48.	Thr-8 to Asp-19.		Ala-1 to Arg-6.	Arg-1 to Cys-9, Leu-64 to Gly-75.	His-24 to Ile-29, Tyr-31 to Asn-41.	Glu-26 to Gln-37.	Gln-11 to His-19, Ala-25 to Glu-38.	Pro-8 to Arg-13,	Ser-33 to Val-38, Ile-50 to Ala-57.			Asn-3 to Gln-9.	Glu-1 to Pro-12,
14722	14723	14724	14725	14726	i di	14727	14728	14729	14730	14731	14732	14733		14734	14735	14736	14737	14738	14739	14740	14741		14742	14743	14744	14745
30 - 425	178 - 345	210 - 311	2 - 292	182 - 346	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40 - 255	1 - 237	120 - 440	175 - 348	17 - 172	102 - 272	3 - 281		141 - 314	168 - 311	2 - 133	73 - 426	56 - 226	121 - 249	1 - 285	92 - 529		1 - 123	2 - 292	55 - 183	92 - 268
4970	4971	4972	4973	4974	1200	4975	4976	4977	4978	4979	4980	4981		4982	4983	4984	4985	4986	4987	4988	4989		4990	4991	4992	4993
825354	783480	920420	615402	733521		576544	576542	576548	860046	706683	859992	576453		953577	576437	576455	277188	576456	577303	918651	496484		932092	859833	953443	967128
HNHEM83	HNHEM85	HNHEN02	HNHEN16	HNHEN56	77. 62.11. 61.	HNHEN66	HNHEN76	HNHE029	HNHEO43	HNHEO83	HNHEO84	HNHEP49		HNHEQ07	HNHEQ46	HNHEQ60	HNHEQ70	нине092	HNHEQ94	HNHER06	HNHER21		HNHES05	HNHES06	HNHES07	HNHES11

	L0766: 4, L0789: 1, S0052: and S0053: 1.	S0053: 2	H0305: 1 and S0053: 1.	S0053: 2		S0053; 2		S0053: 2		S0052: 1 and S0053: 1.			S0053: 2		80053: 2		S0052: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2	L0748: 2, H0402: 1, L0664:	l and S0053: 1.	S0053: 2	S0053: 2	S0052: 1, S0053: 1 and	H0444: 1.	L0361: 2, S0428: 1 and	S0053: 1.	S0053: 2	S0053: 3	80053: 2
Pro-28 to Gly-37.	Lys-53 to Asn-64.	Pro-1 to Ala-7.	Ile-86 to Ser-93.	Asp-14 to Gln-23,	Arg-31 to Glu-38, Ile-42 to Gln-47.	Leu-15 to Gly-28,	Val-44 to Cys-50.	Asp-14 to Phe-19,	Glu-34 to Asn-43.	Gly-31 to Gly-37,	Pro-39 to Ala-46,	Cys-50 to Glu-60.	Pro-49 to Asp-54,	Ser-65 to Trp-73.	Ser-29 to Tyr-40,	Ala-62 to Ala-85.		Arg-25 to Asn-36.	Gln-19 to Gly-26.		Cys-26 to Gln-35.		1	Glu-22 to Gly-31.	Glu-30 to His-35.	Asp-1 to Ser-16,	<u> </u>	Gln-13 to Gly-26.	S			
	14746	14747	14748	14749		14750		14751		14752			14753		14754		14755	14756	14757	14758	14759	14760		14761	14762	14763		14764		14765	14766	14767
	258 - 46	80 - 325	91 - 393	186 - 407		157 - 384		216 - 371		110 - 322			90 - 338		63 - 362		240 - 458	78 - 254	2 - 253	111 - 290	3 - 131	3 - 206		3 - 182	108 - 308	116 - 298		31 - 336		170 - 3	69 - 197	146 - 244
	4994	4995	4996	4997		4998		4999		2000			5001		5005		5003	5004	5005	9009	2002	2008		5009	5010	5011		5012		5013	5014	5015
	675946	576497	881504	973297		916111		967127		576746			900098		953410		577360	724449	276387	574396	577111	716661		577337	575777	924475		905859		953446	286029	576361
	HNHES23	HNHES35	HNHES56	HNHES61		HNHES81		HNHET11		HNHET17			HNHET24		HNHET25		HNHET57	HNHEU50	HNHEU60	HNHEU71	HNHEV25	HNHEV44		HNHEV46	HNHEV49	HNHEW03		HNHEW14		HNHEW19	HNHEW21	HNHEW75

	,																						- 1 1									
S0053: 2	S0053: 2	S0053: 2	H0271: 1 and S0053: 1.	00057.7	50053: 2				S0053: 4	S0053: 3		S0053: 2	S0053: 2	S0053: 2	H0318: 1 and S0053: 1.	S0053: 2		AR054: 7, AR051: 1,	AR050: 0	S0053: 2	S0053: 1 and S0216: 1.	•		H0305: 1 and S0053: 1.	S0053: 3	S0053: 2	S0053: 2	S0053: 1 and H0444: 1.	H0341: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2
	His-1 to Arg-9, Arg-47 to Cys-62.		Cys-3 to Cys-12, Gly-16 to Glu-26, Leu-30 to Ile-36.	21:14:21:0	Gly-1 to Gly-6,	Ala-15 to Gly-20,	Pro-31 to Arg-52,	Leu-79 to Gly-88.		Pro-8 to Val-15,	Pro-53 to Gln-58.	Thr-19 to Cys-32.			Leu-24 to Cys-29.	Gln-3 to Lys-10,	Asp-18 to Leu-24.	Pro-16 to Gln-21.			Ser-7 to Gly-22,	Trp-41 to Thr-48,	Pro-56 to Ser-65, Gin-73 to Len-82		Thr-1 to Ala-12.				Leu-5 to Pro-11.		Pro-3 to Cys-26.	
14768	14769	14770	14771	1 4770	14//7				14773	14774		14775	14776	14777	14778	14779		14780			14781			14782	14783	14784	14785	14786	14787	14788	14789	14790
56 - 196	3 - 257	168 - 374	289 - 426	1 2/1	797 - 1				101 - 424	205 - 432		3 - 191	263 - 397	1 - 99	49 - 153	3 - 104		3 - 266			1 - 267			179 - 361	19 - 219	258 - 413	200 - 430	118 - 270	86 - 427	274 - 444	178 - 348	233 - 406
5016	5017	5018	5019	0005	2070				5021	5022		5023	5024	5025	5026	5027		5028			5029			5030	5031	5032	5033	5034	5035	5036	5037	5038
770081	953566	970764	711225	606363	58/5/6				860036	860037		899656	575741	575745	953438	575788		887442			860033			967126	577302	576394	575786	668713	576865	836006	575740	728265
HNHEW76	HNHEW95	HNHEX12	HNHEX40	INITIONEA	HNHEX34				HNHEX66	HNHEX77		HNHEY59	HNHEY63	HNHEY93	HNHEZ07	HNHEZ18		HNHEZ19			HNHFA05			HNHFA11	HNHFA35	HNHFA59	HNHFB09	HNHFB19	HNHFB27	HNHFB32	HNHFB39	hnhfb53

S0053: 2			S0052: 1 and S0053: 1.				S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0052: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2	S0428: 4, S0116: 1, H0179: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2	80053: 2	S0053: 1 and H0444: 1.	S0053: 2			S0053: 1 and H0521: 1.	S0053: 2 and L0740: 1.	S0053: 2
His-1 to Arg-10,	Asn-20 to Trp-37,	Arg-39 to Pro-47, Glu-53 to Asn-60.	Ile-3 to Val-11,	FIO-59 to Lys-45.				Glu-10 to Val-32.	Lys-3 to Pro-9.	Ala-30 to Gly-43, Ser-53 to Ala-66.		Phe-4 to Gly-9, Thr-29 to Gln-52					Lys-24 to Lys-31.		Arg-11 to Gly-19.	Pro-27 to Pro-32.	Leu-1 to Tyr-11.		Lys-22 to Gly-37,	Thr-46 to Asp-51,	Arg-72 to Asp-77.	Gly-1 to Trp-10, Pro-13 to Pro-25.	Ala-26 to Phe-31, Ala-35 to Gly-42.	
14791			14792		19344	19345	14793	14794	14795	14796	14797	14798	14799	14800	14801	14802	14803	14804	14805	14806	14807	14808	14809			14810	14811	14812
3 - 182			277 - 104		349 - 215	484 - 771	95 - 343	72 - 242	46 - 312	97 - 303	33 - 236	122 - 382	2 - 358	65 - 3	148 - 336	1 - 225	434 - 607	239 - 340	50 - 280	157 - 390	265 - 399	59 - 283	1 - 405			129 - 341	252 - 590	1 - 177
5039			5040	0000	9592	9593	5041	5042	5043	5044	5045	5046	5047	5048	5049	5050	5051	5052	5053	5054	5055	5056	5057			5058	5059	2060
860027			283660	70005	977069	973274	576438	577185	576385	576435	577240	962925	506354	953585	576431	577244	860229	625613	576412	576432	695856	967255	628429			720292	575785	575784
HNHFC34			HNHFC43				HNHFC60	HNHFC61	HNHFC67	HNHFC78	HNHFC92	HNHFD46	HNHFD88	HNHFE07	HNHFE40	HNHFE69	HNHFF08	HNHFF21	HNHFF29	HNHFF56	HNHFG07	HNHFG11	HNHFG37			HNHFG94	HNHFH21	HNHFH56

															:																			
								:																			-							
S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2 and S0216: 1.			S0053: 2, L0748: 1 and	L0758: 1.	S0053; 3		S0053: 3			S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	H0416: 1, S0053: 1 and	L0439: 1.	S0053: 1 and S0216: 1.	S0053: 2	H0179: 1 and S0053: 1.			S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2
Gly-8 to Trp-14.	Lys-22 to Glu-29.	Ala-40 to Ser-47.		Glu-25 to Arg-31,	Arg-35 to Gly-41,	Asn-56 to Leu-61.	Asn-1 to Arg-10,	Asp-13 to Met-20.	Asn-31 to Ser-37,	Ser-78 to Gly-97.	Glu-1 to Glu-9,	Val-14 to Gly-19,	Lys-25 to Thr-32.	Val-6 to Ala-15.	Leu-1 to Ser-9.				Gly-1 to Gln-12.		Val-1 to Gln-6.	Gln-23 to His-32,	Pro-48 to Leu-55.		Leu-20 to Gly-27.	Ala-1 to Ala-6,	Ala-29 to Leu-40,	Ser-65 to Tyr-77.	Trp-1 to Trp-6.	Thr-7 to Cys-13.		Thr-17 to Gly-25.		Arg-1 to Gln-14,
14813	14814	14815	14816	14817			14818		14819		14820			14821	14822	14823	14824	14825	14826	14827	14828	14829		14830	14831	14832			14833	14834	14835	14836	14837	14838
142 - 399	3 - 89	3 - 182	260 - 406	172 - 435			265 - 143		34 - 336		43 - 453			3 - 122	45 - 398	178 - 303	14 - 358	80 - 220	1 - 165	46 - 180	180 - 338	17 - 292		85 - 279	284 - 430	2 - 301			1 - 162	1 - 285	27 - 356	1 - 204	111-1	127 - 315
5061	5062	5063	5064	5905			5066		2905		5068			5069	5070	5071	5072	5073	5074	5075	9/05	5077		5078	5079	2080			5081	5082	5083	5084	5085	5086
773610	575747	575751	577328	720757			699523		576386		970770			664588	576428	916787	577331	691083	727258	761672	576408	707311		860013	964849	916773			418108	692807	265992	576398	576400	860003
HNHFH78	HNHFI69	HNHFI88	HNHF195	HNHFJ45			HNHFJ67		HNHFK37		HNHFK77			HNHFL48	HNHFL82	HNHFM01	HNHFM32	HNHFN30	HNHFN52	HNHFN95	HNHFO45	HNHF048		HINHFP09	HNHFP10	HNHFQ01			HNHFQ19	HNHFQ30	HNHFQ75	HNHFQ88	HNHFQ92	HNHFR12

																							,										
	S0052: 1 and S0053: 1.	S0053: 2	80053: 2	H0271: 1 and S0053: 1.		S0053: 2	80053: 2			S0053: 2	H0073: 1 and S0053: 1.	S0053: 2	S0053: 1 and S0216: 1.		S0053: 2	S0052: 1 and S0053: 1.	S0053: 2	H0255: 2 and S0053: 1.	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2		S0053: 2 and H0436: 2.		:	S0053: 2			S0053: 2	S0053: 2	S0052: 1 and S0053: 1.	S0053: 2	S0053: 2
Gly-23 to Met-29.	Arg-92 to Gly-98.	Lys-7 to Thr-13.	Thr-1 to Lys-11.	Thr-1 to Asp-10,	Arg-49 to Gln-55.		Glu-4 to Glu-9,	Glu-11 to Ser-19,	Pro-24 to Cys-33.			Lys-9 to Gly-16.	Leu-14 to Asn-29,	Pro-45 to Arg-52, Ala-58 to Gly-65.			Asn-1 to Glu-24.			Glu-30 to Pro-50.	Pro-11 to Ala-16,	Ser-24 to Thr-34.	Arg-17 to Val-26,	Asn-28 to Gly-35,	Arg-37 to Leu-42.	His-1 to Gly-9,	Pro-23 to Gly-28,	Gln-66 to His-75.			Ser-53 to Asn-77.	Gln-8 to Ser-16.	Lys-18 to Tyr-35.
	14839	14840	14841	14842		14843	14844			14845	14846	14847	14848		14849	14850	14851	14852	14853	14854	14855		14856			14857			14858	14859	14860	14861	14862
	19 - 444	136 - 336	1 - 228	108 - 473		2 - 151	191 - 406			184 - 312	91 - 444	1 - 171	77 - 373		34 - 399	281 - 475	3 - 173	86 - 346	150 - 329	1 - 297	3 - 338		3 - 131			3-356			1 - 237	109 - 38	62 - 370	258 - 425	2 - 169
	5087	2088	5089	2090		5091	5092			5093	5094	5095	9609		5097	5098	5099	5100	5101	5102	5103		5104			5105			5106	5107	5108	5109	5110
	964716	577330	751787	924610		734798	625726			707335	920844	860002	952376		576390	724417	860000	925820	757281	959476	663912		674638			959899			716628	753045	756459	712347	670946
	HNHFR22	HNHFR24	HNHFR67	HNHFS03		HNHFS79	HNHFU09			HNHFU35	HNHFU45	HNHFU57	HNHFV16		HNHFV52	HNHFV56	HNHFV66	HNHFV68	HNHFV70	HNHFW08	HNHFW29		HNHFX22			HNHFX35			HNHFX56	HNHFX68	HNHFX70	HNHFX89	HNHFY21

								, , ,																								
S0053: 2	S0053: 2 and H0271: 1.	S0053: 2	S0053: 3	S0053: 2	80053: 2	S0053: 1 and S0216: 1.	H0421: 1 and S0053: 1.		S0053: 2				L0748: 4, S0053: 1 and	H0187: 1.	S0053: 2 <sup>-</sup>	80053: 2	S0053: 2		S0216: 2 and S0053: 1.	S0053: 2	S0053: 2	AR089: 1, AR061: 1	80053: 2			S0052: 1 and S0053: 1.		S0053: 1 and S0216: 1.	S0053: 2		S0053: 2	S0053: 2
	Pro-4 to Lys-19.	Lys-1 to Ile-6.	Thr-45 to Lys-52.				Phe-17 to Arg-22,	Tyr-31 to Ser-36, Glv-55 to Arg-70.	His-1 to Lys-6,	Gly-24 to Ser-40,	Ser-53 to Arg-58,	Leu-68 to Ser-/4.			Gly-1 to Gly-6, Ser-11 to Pro-19.	Tyr-12 to Phe-24.	Pro-5 to Pro-17,	Pro-46 to Lys-51.	Leu-3 to Arg-8.			His-8 to Gly-18,	Glu-35 to Thr-41,	Arg-53 to Asp-59,	Glu-82 to Pro-94.	Met-1 to Arg-6,	Asn-36 to Ala-42.	Arg-46 to Lys-51.	Thr-15 to Glu-21,	Ser-23 to Ser-32.	Arg-6 to Pro-19.	Arg-8 to Trp-14, Arg-18 to Ala-23,
14863	14864	14865	14866	14867	14868	14869	14870		14871				14872		14873	14874	14875		14876	14877	14878	14879				14880		14881	14882		14883	14884
24 - 164	200 - 373	50 - 166	1 - 156	37 - 174	123 - 233	121 - 222	58 - 267		3 - 224				478 - 654		1 - 420	177 - 323	2 - 172		105 - 281	74 - 307	165 - 332	22 - 645				322'- 197		65 - 325	3 - 104		13 - 387	54 - 251
5111	5112	5113	5114	5115	5116	5117	5118		5119				5120		5121	5122	5123		5124	5125	5126	5127				5128		5129	5130		5131	5132
734764	967093	702461	719073	781205	784362	927065	707337		711654		·		733745		953416	920149	667930		934632	753053	671077	939727				683432		715304	746605		835984	956019
HNHFY95	HNHGA24	HNHGA33	HNHGA46	HNHGB83	HNHGB96	HNHGC13	HNHGC35		HNHGC41				HNHGC62		HNHGD07	HNHGD14	HNHGD50		HNHGD51	HNHGD68	HNHGD84	HNHGE09				HNHGE27		HNHGE43	HNHGE64		HNHGF14	HNHGF21

								-																										
	S0053: 2	S0053: 1 and S0216: 1.	S0052: 1 and S0053: 1.			S0053: 1 and S0216: 1.			S0053: 2	S0052: 1 and S0053: 1.	S0053: 2 and L0748: 2.	80053: 2	S0053: 3	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2		S0052: 1 and S0053: 1.		S0053: 2			S0053: 3	S0053: 2	S0053: 2	S0052: 2 and S0053: 1.	S0053: 1 and S0216: 1.	S0053: 2		S0053: 2			S0053: 3	H0402: 1 and S0053: 1.
Leu-58 to Leu-63.	Ala-23 to Gly-28.	Ser-28 to Glu-33.	Leu-12 to Ser-33,	Ala-42 to Leu-48,	Ser-57 to Pro-65.	Ala-7 to Ala-17,	Ser-32 to Gly-42,	Glu-61 to Lys-69.	Leu-62 to Pro-69.	Ala-40 to Thr-46.			Asp-53 to Trp-63.	Lys-12 to Arg-23.	Gly-30 to Phe-38.	Arg-53 to Gln-62,	Pro-79 to Ser-84.	His-1 to Arg-9,	Pro-44 to Gln-49.	Val-22 to His-42,	Arg-57 to His-62,	His-75 to Arg-80.	Gly-26 to Gly-37.	Pro-18 to Arg-27.	Asp-13 to Trp-23.		Phe-69 to Ile-75.	Ser-1 to Trp-9,	Pro-15 to Glu-26.	Cys-4 to Leu-10,	Pro-12 to Gly-21,	Ile-31 to Asn-38.	Glu-34 to Thr-42.	Ala-1 to Leu-8.
	14885	14886	14887			14888			14889	14890	14891	14892	14893	14894	14895	14896		14897		14898			14899	14900	14901	14902	14903	14904		14905			14906	14907
	164 - 331	70 - 384	21 - 425			2 - 208			2 - 280	276 - 431	146 - 310	76 - 231	1 - 198	73 - 303	22 - 195	1 - 411		3 - 257		2 - 241			2 - 175	124 - 303	3 - 143	157 - 345	1 - 225	193 - 312		173 - 397			96 - 323	3 - 167
	5133	5134	5135			5136			5137	5138	5139	5140	5141	5142	5143	5144		5145		5146			5147	5148	5149	5150	5151	5152		5153			5154	5155
	708708	859852	705128			761811			730957	750389	935530	764446	746607	772213	792335	988092		920147		959499	·		713036	707336	775218	576279	920896	625624		916899			686733	820088
	HNHGF37	HNHGF45	HNHGF46			HNHGF85			HNHGF90	HNHGF91	HNHGG06	HNHGG73	HNHGG76	HNHGG89	HNHGG93	HNHGG95		HNHGH02		HNHGH20			HNHGH42	HNHGI35	HNHGI79	HNHGI81	HNHGJ03	HNHGJ09		HNHGJ20			HNHGJ28	HNHGJ39

				113900, 126340, 126391, 130410, 134790, 138570, 160900, 173850, 191044, 258501, 600040, 600138, 602225, 602225																	
				19q13.3-q13.4																	
S0053: 2	S0053: 2	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0052: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2			S0053: 2	S0053; 2		S0053: 2	S0053: 2	S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.		S0053: 3		80053: 2
Gly-26 to Ala-42, Thr-51 to Gly-58.	Gln-12 to Ser-17.		His-2 to Gln-8, Pro-67 to Ala-73.			Pro-45 to Glu-59, Gly-66 to Leu-73.		Arg-1 to Gly-9,	Arg-17 to His-29,	Met-40 to Arg-47, His-51 to Pro-61.	Arg-2 to Leu-11.	Ser-9 to Leu-15,	His-5 / to Cys-64, Glu-84 to Arg-94.	Gln-1 to Glu-6, Arg-20 to Met-25.	Ile-17 to Pro-26.		Pro-31 to Gly-43,	Leu-48 to Asn-57, I ys-87 to Ser-94	Gln-35 to Gly-46,	Ser-54 to Phe-59, Val-64 to Gly-74.	
14908	14909	14910	14911	14912	14913	14914	14915	14916			14917	14918	!	14919	14920	14921	14922		14923		14924
146 - 418	172 - 402		117 - 335	2 - 421	139 - 273	2 - 289	3 - 92	106 - 324			2-97	3 - 284		161 - 268	233 - 391	8 - 163	65 - 346		129 - 404		250 - 447
5156	5157	5158	5159	5160	5161	5162	5163	5164			5165	5166		5167	5168	5169	5170		5171		5172
750269	777958	935525	783674	728593	663923	670955	750267	732370			859964	698047		699292	916551	934446	780328		920146		678151
HNHGJ65	HNHGJ81	HNHGK05	HNHGK24	HNHGK70	HNHGN17	HNHG021	HNHGO65	8905HNH			HNHGP08	HNHGP31		HNHGP32	HNHGP40	HNHGP73	HNHGP83		HNHGQ02		HNHGQ25

S0053: 2	S0053: 2	S0053: 2		S0053: 2	S0053: 1 and S0216: 1.	S0053: 2		S0053: 2	S0053: 2	S0053: 2	80053: 2	S0053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2 and S0216: 1.	S0053: 2	80053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2		S0053: 2	S0052: 1 and S0053: 1.	S0053: 2		
Thr-58 to Cys-63, Ala-99 to Ser-104.	Met-37 to Gln-44.	Leu-22 to His-33, Ala-46 to Leu-53.	Leu-22 to His-33, Ala-46 to Leu-53.	Phe-4 to Ile-17.		Gly-63 to Gln-69,	Asp-84 to Ser-89, Val-103 to Asn-112.		Leu-6 to Gln-15.	Asn-1 to Leu-6.						Ser-4 to Pro-11.		Gly-1 to His-36.	Pro-35 to Leu-48.	His-1 to Lys-8.		Thr-1 to Ser-6,	Pro-28 to Trp-37, Phe-51 to Ile-61.			Pro-16 to Arg-25,	Gln-31 to Pro-36,	Ser-65 to Arg-75, Glu-77 to Val-82.
14925	14926	14927	19346	14928	14929	14930		14931	14932	14933	14934	14935	14936	14937	14938	14939	14940	14941	14942	14943	14944	14945		14946	14947	14948		
52 - 447	280 - 471	342 - 500	348 - 506	147 - 329	108 - 314	97 - 435		3 - 275	146 - 367	122 - 328	71 - 445	179 - 421	362 - 499	61 - 264	18 - 56	161 - 355	198 - 329	1 - 195	2 - 322	3 - 287	266 - 379	23 - 262		113 - 358	384 - 614	47 - 385		
5173	5174	5175	9594	5176	5177	5178		5179	5180	5181	5182	5183	5184	5185	5186	5187	5188	5189	5190	5191	5192	5193		5194	5195	5196		
859965	573340	562748	581933	698501	918711	706671		90/80/	859962	725710	765602	668893	791822	716634	783041	761837	666473	674653	421819	754053	706695	496224	-	687120	711657	727175		
HNHGQ28	HNHGQ49	HNHGQ79		HNHGR35	HNHGR43	HNHGS34		HNHGT37	HNHGT51	HNHGT64	HNHGT74	HNHGU19	HNHGU41	HNHGU44	HNHGU84	HNHGU89	HNHGV18	HNHGV22	HNHGV29	HNHGV45	HNHGV91	HNHGX33		HNHGX40	HNHGX41	HNHGX52		

80053: 2	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2	S0053: 2 and S0216: 1.	H0271: 1 and S0053: 1.	S0053: 2	S0053: 2 and L0476: 1.	S0053: 2	S0053: 2	S0428: 1 and S0053: 1.	S0053: 2	S0052: 1 and S0053: 1.	S0053: 2	H0271: 1 and S0053: 1.	S0053: 2	S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2	S0052: 1, S0053: 1, H0521:	S0053. 2	1	S0053: 3	S0053: 3 and L0589: 2.
Phe-30 to Asp-36.			Asp-1 to Pro-8, Leu-29 to Asp-35.	Pro-22 to His-39, Val-41 to Glv-48.	Asp-21 to Ser-27, Ser-76 to Ser-85	Arg-6 to Cys-12, Leu-56 to Met-62.	Arg-19 to Pro-33, Pro-39 to Ser-54.	Leu-46 to Glu-55.	Asp-10 to Trp-15.	Ala-1 to Lys-7, Leu-18 to Gln-35.		Gly-2 to Asn-11.	Ala-14 to Val-28.		Gly-59 to Asp-78.		Pro-45 to Gln-54.		Lys-14 to Cys-19.	Asp-10 to Gly-18.	Thr-6 to Ser-20.		Lys-16 to Ser-31.	Met-6 to Ghr-13	Arg-15 to Trp-20.		
14949	14950	14951	14952	14953	14954	14955	14956	14957	14958	14959	14960	14961	14962	14963	14964	14965	14966	14967	14968	14969	14970	14971	14972	14973		14974	14975
71 - 310	3 - 251	143 - 334	108 - 281	175 - 423	2 - 349	20 - 205	87 - 368	1 - 243	45 - 374	2 - 199	129 - 1	209 - 433	2 - 85	209 - 421	3 - 278	2 - 280	2 - 166	258 - 497	45 - 284	61 - 159	107 - 247	141 - 332	354 - 614	95 - 304		83 - 316	1-180
5197	5198	5199	5200	5201	5202	5203	5204	5205	5206	5207	5208	5209	5210	5211	5212	5213	5214	5215	5216	5217	5218	5219	5220	5221		5222	5223
683523	781196	657253	663921	859951	835531	859949	999069	713797	720360	775209	785516	840129	708131	742594	496227	669915	708709	753047	790198	964993	970719	677224	702697	880/96		860117	713800
HNHGXS5	HNHGX83	HNHGY13	HNHGY17	HNHGY18	HNHGY19	HNHGY26	HNHGY29	HNHGY42	HNHGY47	HNHGY79	HNHGY86	HNHGY91	HNHGZ36	HNHGZ63	- HNHHA21	HNHHA32	HNHHA37	HNHHA68	HNHHA91	HNHHB11	HNHHB12	HNHHB24	HNHHB64	HNHHC12		HNHHC17	HNHHC29

S0053: 2	S0053: 3	S0053: 2	S0053: 2	80053: 2		S0053: 2	S0053: 3	S0053: 3	S0053: 3	S0053: 2	S0053: 2	S0053: 2		S0053: 2	S0053: 2			S0053: 2		S0053: 3	S0053: 2	S0053: 3	S0053: 1 and S0216: 1.	S0053: 3	S0053: 3	S0053: 3	S0053: 2	S0053: 2	S0053: 4		S0053: 2	S0053: 2	S0052: 1 and S0053: 1.	S0053: 2
	Cys-1 to Ile-11.	Gln-14 to Met-19.	,	Asp-1 to Ala-6,	Pro-23 to Leu-30.	Ser-38 to Ser-48.	Lys-21 to Pro-41.	Thr-30 to Pro-40.	Met-6 to Arg-12.	Leu-11 to Glu-17.		Gly-1 to Arg-9,	Ser-28 to Trp-33.		Asp-1 to Asn-10,	Gly-18 to Trp-23,	Gly-25 to Ser-33.	Gly-1 to Ala-12,	Pro-14 to Gly-21.	Ala-1 to Pro-25.	Tyr-7 to Phe-24.		Pro-35 to Gly-43.			Pro-25 to Pro-31.			Ala-1 to Cys-9,	Pro-51 to Ser-56.				Gly-1 to Gly-18,
14976	14977	14978	14979	14980		14981	14982	14983	14984	14985	14986	14987		14988	14989			14990		14991	14992	14993	14994	14995	14996	14997	14998	14999	15000		15001	15002	15003	15004
100 - 186	159 - 37	1 - 252	3 - 239	35 - 439		41 - 190	153 - 419	152 - 319	223 - 405	33 - 290	100 - 312	1 - 198		35 - 205	3 - 320			1 - 261		43 - 240	2 - 217	80 - 247	68 - 373	59 - 184	144 - 1	41 - 292	2 - 247	61 - 249	56 - 223		28 - 225	134 - 313	3 - 188	1 - 351
5224	5225	5226	5227	5228		5229	5230	5231	5232	5233	5234	5235		5236	5237			5238		5239	5240	5241	5242	5243	5244	5245	5246	5247	5248		5249	5250	5251	5252
699291	707340	719068	736069	781197		707338	741837	751663	779893	953408	630223	745100		774041	916546			698502		698490	496204	859946	745095	775205	796402	720361	724411	750266	657251		713796	734793	964659	859941
HNHHC33	HNHHC36	HNHHC46	HNHHC58	HNHHC83	-	HNHHD35	HNHHD61	HNHHD67	HNHHD82	HNHHE07	HNHHE48	HNHHE63		HNHHE80	HNHHF01			HNHHF33		HNHHF51	HNHHF56	HNHHF58	HNHHF63	HNHHF79	HNHHF96	HNHHG47	HNHHG50	HNHHG65	HNHHH13		HNHHH42	HNHHHI57	HNHHI10	HNHHI28

					,,																									
									!		•																			
	S0053: 2	S0140: 1 and S0053: 1.	80053: 2			S0052: 1 and S0053: 1.				H0635: 1, H0063: 1 and	S0053: 1.	S0053: 4		S0053: 2 and S0216: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 2 and S0216: 1.	S0053: 2	S0053: 3	S0053: 2	S0053: 1 and S0216: 1.		S0053: 2	S0053: 2		S0053: 2	L0666: 2, L0717: 1, H0057:	1, L0659: 1, S0053: 1 and L0748: 1.	S0053: 2
Asn-49 to Asn-72, Gly-86 to Gln-98.	Arg-17 to Thr-24.	Glu-13 to Ser-20, Gln-42 to Thr-52.	Ile-3 to Lys-9,	Leu-26 to Cys-31,	Cys-39 to Gly-47.	Thr-7 to Arg-18,	Arg-42 to Leu-48,	Arg-51 to Arg-59,	Pro-61 to Ala-/3.	Glu-16 to Tyr-25,	Gln-69 to Thr-76.	Arg-15 to Leu-23,	Lys-30 to Gln-53.	Gly-1 to Thr-30.	Pro-23 to Leu-30.			Leu-1 to Gln-14.	Arg-12 to Leu-19.	Arg-9 to Phe-15.		His-1 to Tyr-7,	Thr-11 to Ser-17, 1 ten-33 to Cys-39.		Pro-12 to Cys-20,	Ser-23 to Asn-31.				Asn-9 to Cys-16, Pro-19 to Ser-31,
	15005	15006	15007			15008				15009		15010		15011	15012	15013	15014	15015	15016	15017	15018	15019		15020	15021		15022	15023		15024
	37 - 171	213 - 440	171 - 386			72 - 689				192 - 431		142 - 300		1 - 150	1 - 228	193 - 336	226 - 363	370 - 561	164 - 310	107 - 322	53 - 181	3 - 134		76 - 207	2 - 130		76 - 285	271 - 149		158 - 334
	5253	5254	5255			5256				5257		5258		5259	5260	5261	5262	5263	5264	5265	5266	5267		5268	5269		5270	5271		5272
	706699	708132	750263			210619				935517		937598		718081	741835	765601	781980	792326	674617	757201	765598	756587		964656	661964		678144	575451		706667
	HNHHI34	HNHHI36	HNHHI65			HNHHI72				HNHHK06		HNHHK39		HNHHK46	HNHHK62	HNHHK74	HNHHK84	HNHHK93	HNHHL22	HNHHL70	HNHHL74	HNHHL92		HNHHM10	HNHHM17		HNHHM25	HNHHM28		HNHHM35

	80053: 3	S0053: 2	S0053: 4 and L0592: 1.		S0053: 2	S0053: 4	S0053: 2 and S0428: 1.	S0053: 2	S0053: 3	S0053: 3		S0053: 2	S0053: 2	S0053: 6	S0053: 3	S0053: 2	S0053: 2	S0053: 2	S0053: 4	S0053: 2	S0053: 5	S0053: 2	-	S0053: 4	S0053: 4			S0053: 2	S0053: 3
Asn-45 to Val-53.	Leu-17 to Leu-25, Asn-42 to Glv-47	,	Val-17 to Ala-22,	Pro-49 to Ser-55.		Ser-17 to Gly-23.				Gln-1 to Asp-7,	Pro-13 to Pro-18, Ser-34 to Ser-43.	Pro-9 to Gly-23, Pro-27 to Thr-39.		Arg-24 to Ser-32, Pro-35 to Ser-42.		Asn-17 to Asn-28.		Ile-1 to Arg-10.		Arg-25 to Gly-32.		His-4 to Gly-9,	Ser-13 to Arg-19, Thr-27 to Glu-32.		Arg-20 to Ala-26,	Gly-28 to Thr-35,	Ala-43 to Pro-55.	Pro-32 to Arg-38.	
	15025	15026	15027		15028	15029	15030	15031	15032	15033		15034	15035	15036	15037	15038	15039	15040	15041	15042	15043	15044		15045	15046			15047	15048
	20 - 160	87 - 203	69 - 377		140 - 259	46 - 285	159 - 362	109 - 285	3 - 254	71 - 268		1 - 117	1 - 150	203 - 358	214 - 330	2 - 169	101 - 280	77 - 259	1 - 159	2 - 142	26 - 241	91 - 357		13 - 129	137 - 346		200	75 - 230	65 - 235
	5273	5274	5275		5276	5277	5278	5279	5280	5281		5282	5283	5284	5285	5286	5287	5288	5289	5290	5291	5292		5293	5294		200	5295	5296
	708715	727166	694373		757202	922088	920129	953393	964657	189899		698035	745700	751659	953398	424836	722991	727167	774038	920120	935501	661962		935502	720358			741830	775194
	HNHHM37	HNHHM52	HNHHM55		HNHHM70	HNHHM80	HNHHN03	HNHHN07	HNHHN11	HNHHN19		HNHHN31	HNHHN62	HNHHN93	HNHHO08	HNHHO15	HNHHO49	99OHHNH	HNHHO79	HNHHP02	HNHHP04	HNHHP16		HNHHR04	HNHHR46			HNHHR61	HNHHR93

									æ															
S0053: 2, S0114: 1, S0116: 1, H0580: 1, H0179: 1, H0271: 1, H0090: 1, H0264: 1, L0805: 1, L0527: 1 and L0367: 1,	S0053: 3	S0053: 3		S0053. 2 and S0216. 1	S0053: 2	S0053: 2	S0053: 2	\$0053.7				S0053: 2		S0053: 2	S0053: 2	\$0053.2	S0053: 2	S0053: 2		S0053: 2		S0053: 5	S0053: 2	S0053: 2
Leu-52 to Cys-57.	Arg-3 to Ser-11.	Thr-8 to Gly-16,	Pro-19 to Asn-29,	OIII-30 to Asil-42.	Ser-8 to Gln-13.	Asn-6 to Thr-11, His-35 to Ala-41	Ala-3 to Lys-17, Ser-41 to Glv-50.	Ser-1 to Glu-6	Glu-9 to Leu-14,	Asn-39 to Asn-46,	Fro-65 to His-/1.	Asn-60 to Leu-66, Pro-70 to Val-93,	Ile-101 to Leu-107.		Ala-30 to Gln-39,	dy-27 to tim-07.		Pro-19 to Ala-25,	Ala-53 to Pro-64, Arg-71 to Cys-77.	Gly-13 to Lys-20,	Cys-32 to Tyr-49, Glu-60 to Thr-70.	Arg-20 to Leu-38.		Glu-1 to Gly-8.
15049	15050	15051		15052	15053	15054	15055	15056				15057		15058	15059	15060	15061	15062		15063		15064	15065	15066
514 - 684	124 - 420	188 - 313		18 - 131	30 - 404	3 - 431	2 - 193	3 - 287				55 - 420		100 - 207	3 - 203	1 - 159	103 - 201	2 - 496		1 - 237		64 - 195	204 - 10	117 - 272
5297	5298	5299		5300	5301	5302	5303	5304				5305		5306	5307	5308	5309	5310		5311		5312	5313	5314
956186	765584	788913		775192	707342	465438	783033	465395	,			859935		699255	739288	742071	765588	920094		661931		589699	706675	736046
HNHHS46	HNHHS74	HNHHS76		HNHHS79	HNHHT35	HNHHT55	HNHHT70	HNHHU46				HNHHW01		HNHHW32	HNHHW58	HNHHW61	HNHHW73	HNHIA02		HNHIA16		HNHIA20	HNHIA34	HNHIA58

																												147781, 172471, 182381					
																												16p11.2					
80053: 2	AR054: 9, AR051: 8,	AR050: 8		S0053: 2	AR089: 7, AR061: 6	S0053: 4	S0053: 4	S0053: 2		S0053: 2 and S0052: 1.	S0053: 3	S0053: 2	H0416: 1 and S0053: 1.	S0053: 2	S0053: 2	S0053: 2	S0053: 3		S0053: 2	ļ	S0053: 2	S0053: 3, L0365: 1 and	S0052: 1.	S0053: 2				S0053: 3	S0053: 2				
	Ser-71 to Leu-76.		Ser-71 to Leu-76.	Glu-35 to Gly-47.	Lys-8 to Pro-14,	Asn-47 to Cys-52.	Glu-18 to Cys-24.	Gly-1 to Gln-8,	Gly-21 to Pro-28.		Ala-55 to Asp-69.	Arg-11 to Ser-17.	Trp-1 to Lys-10.	Pro-41 to Trp-46.	Pro-31 to Tyr-39.	Pro-38 to Pro-43.	Lys-19 to Tyr-25,	Gln-48 to Glu-58.	Gly-16 to Arg-22,	Thr-53 to Ala-61.	Gln-22 to Gly-28.	Gly-1 to Ile-6,	Pro-14 to Pro-19.	Arg-2 to Pro-9,	Ser-11 to Lys-26,	Ser-35 to Thr-50,	Phe-74 to Asp-81.		Glu-2 to Gln-9,	Ala-20 to Trp-27,	Ser-44 to Ala-51,	Pro-64 to Ser-69, Ala-76 to Pro-81.	
15067	15068		19347	15069	15070		15071	15072		15073	15074	15075	15076	15077	15078	15079	15080		15081		15082	15083		15084				15085	15086				
112 - 360	10 - 270		11 - 298	56 - 217	46 - 399		2 - 169	1 - 207		1 - 363	14 - 238	271 - 423	243 - 434	148 - 384	37 - 243	155 - 409	92 - 268		3 - 371		13 - 204	217 - 666		2 - 244	/		- 1	2 - 181	3 - 431				
5315	5316		9595	5317	5318		5319	5320		5321	5322	5323	5324	5325	5326	5327	5328		5329		5330	5331		5332				5333	5334	- 1.			
745861	559344		888195	970720	908419		967038	734763		781214	793210	705375	842003	928622	690646	727151	731761		774044		765585	921945		916503				465404	298999				
HNHIA64	HNHIA73			HNHIA94	HNHIA95		HNHIB22	HNHIB56		HNHIB77	HNHIB94	HNHIC39	HNHIC46	HNHIC96	HNHID29	HNHID53	HNHID55		HNHID79		HNHIE75	HINHIE82		HNHIG01				HNHIG13	HNHIG19				

																									,							
S0053: 3	S0053: 2	S0053: 2	S0053: 3		0.05000	S0033; 2	S0053: 2		S0053: 2	S0053: 2		H0271: 1 and S0053: 1.	S0053: 2	80053: 2	S0053: 3	S0053: 1 and S0216: 1.	S0053: 2	S0053: 3	S0053: 1 and S0216: 1.	S0053: 2		S0053: 2		S0216: 2	S0216: 2	S0216: 2	S0216: 2	S0216: 2	AR061: 7, AR089: 4	S0216: 2	S0216: 2 and S0428: 1.	S0216: 2
Asn-39 to Arg-44.		Pro-78 to Arg-92.	Asn-10 to Cys-17,	Pro-19 to Arg-27,	TI: 27 to I :: 42	mis-5/ to Lys-45.	Glu-11 to His-22, $\frac{1}{10}$ $\frac{21}{10}$ $\frac{21}{10}$ $\frac{21}{10}$ $\frac{21}{10}$	F10-51 to Gill-50.		Arg-8 to Lys-16,	Pro-40 to Arg-51.		Trp-24 to Ser-32.	His-1 to Trp-10.						Thr-7 to Arg-14,	Pro-33 to Ser-38, Gly-45 to Lys-75.	Asn-3 to Trp-14,	Gly-31 to Lys-39, Val-46 to Asp-51.		Ser-17 to Val-31.			Gly-6 to Leu-13.		Arg-40 to Gly-46.		Gln-51 to Asp-62.
15087	15088	15089	15090		15001	16001	15092		15093	15094		15095	15096	15097	15098	15099	15100	15101	15102	15103		15104		15105	15106	15107	15108	15109	15110		15111	15112
31 - 285	284 - 412	36 - 371	2 - 244		177 221	162 - 331	16 - 195		128 - 415	70 - 222		34 - 174	179 - 325	3 - 236	84 - 257	153 - 422	100 - 246	1 - 141	69 - 290	77 - 403		147 - 299		154 - 417	302 - 93	223 - 372	115 - 225	1 - 177	51 - 443		1 - 138	167 - 358
5335	5336	5337	5338	_	5220	2000	5340	., .,	5341	5342		5343	5344	5345	5346	5347	5348	5349	5350	5351		5352		5353	5354	5355	5356	5357	5358		5359	5360
708713	753025	465407	675262		681777	001/2/	089891	20000	/20333	739290		684531	760371	765591	779874	734114	775407	280296	795877	657249		707339		859926	739885	859923	761427	786555	762011		793658	721149
HNHIG37	HNHIG68	HNHIG71	HINHIH23		HNIHIH27	TENTING 1	HNH1H29	Thursday	HNHIH46	HNHIH58		HNHIH66	HNHIH71	HNHIH73	HNHIH82	96HIHNH	HNHIR84	HNHIS14	HNHIV95	HNHIW13		HNHIW35		HNHKH15	HNHK160	HNHKJ24	HNHKL72	HNHKL88	HINHKN73		HNHKP30	HNHKP48

S0216: 2	S0053: 1 and S0216: 1.	S0216: 2	S0216: 2	S0216: 2	S0216: 2	H0402: 1 and S0216: 1.	S0216: 1 and H0445: 1.	80216; 2	S0216: 2			· · · ·	S0216: 3	S0002: 1 and S0216: 1.	S0428: 1 and S0216: 1.	S0216: 2	S0216: 2			S0428: 1 and S0216: 1.	L0764: 1, S0216: 1 and H0522: 1.	S0216: 2		S0216: 2		110054.1 2.3 00317.1	H0254: 1 and S0216: 1.	S0052: 1, S0053: 1 and S0216: 1.
	Ser-8 to Ala-15.	Thr-16 to Ala-24, Asn-33 to Asn-38.	Ser-6 to Asn-18.		Lys-26 to Met-31.	Glu-36 to Ser-45.	Pro-43 to Gln-50.	Gln-1 to Glu-6, Aro-22 to Glv-29	Gln-32 to His-37.	Ala-63 to His-69,	Pro-94 to Ala-110,	Ser-136 to Gln-145.		Ser-1 to Lys-7, Glu-15 to Val-23.			Asn-35 to Leu-41,	Tyr-45 to Phe-50,	Thr-58 to Thr-67.	Ser-15 to Leu-21.		Ala-63 to Cys-71,	Pro-80 to Gly-89, Pro-102 to Gly-116.	Glu-10 to Glu-21,	Ser-39 to Ala-44,	A = 16 to Cl. 32	Arg-10 to Gry-23, Trp-60 to Trp-65.	Gln-33 to Gly-42, Ala-59 to Arg-72,
15113	15114	15115	15116	15117	15118	15119	15120	15121	15122				15123	15124	15125	15126	15127			15128	15129	15130		15131		15127	15152	15133
526 - 726	92 - 241	79 - 324	30 - 137	3 - 119	205 - 375	14 - 193	42 - 290	247 - 504	1 - 531				251 - 409	334 - 477	163 - 387	78 - 377	85 - 288			107 - 340	557 - 814	1 - 420	-	388 - 585		2 310	7-310	241 - 609
5361	5362	5363	5364	5365	5366	2367	5368	5369	5370				5371	5372	5373	5374	5375			5376	5377	5378		5379	_	5380	2300	5381
761432	750487	766926	934643	766924	751205	786020	767917	761429	780650				963575	796804	789625	771530	966164			958422	784264	754480		761430		786461	/00401	970724
HNHKP72	HNHKS69	HNHKS75	HNHKT06	HNHKT75	HNHKV67	HNHKW47	HNHKW76	HNHKW81	HNHKW83				HNHKX10	HNHKX38	HNHKX47	HNHKX77	HNHKZ11			HNHLA08	HNHLA16	HNHLA55		HNHLA71		HNHI A 80	HINDLA09	HNHLA90

	6:2		6: 2	6:2			6: 2	S0053: 1 and S0216: 1.		6:2	6: 2	S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.			6: 2		S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.	S0052: 1 and S0216: 1.	S0053: 1 and S0216: 1.	S0052: 1 and S0216: 1.	H0179: 2 and S0216: 1.	5: 2	5: 2	5; 2	6.5	7.0	2,7	2: 7	2: 1 and S0216: 1.	5: 2	5: 2
104.	30, S0216: 2		66. S0216: 2	46, S0216: 2	.56,	70.	S0216: 2		35.	. S0216: 2	S0216: 2	S005		.25,	55.	2, S0216: 2	36, 56.		S005	S0052	S0053	S0052	H017		S0216: 2	24, S0216: 2	49.			S0216: 2			S0216: 2
Gly-95 to Ser-104			Ser-58 to Ala-66.		Leu-49 to Glu-56,	Pro-64 to Ser-70	7 Gly-1 to Ser-6.		Pro-29 to Ser-35	Lys-3 to His-8.			Phe-5 to Gly-16,	Thr-18 to Met-25,		_	Val-21 to Leu-36,   Gln-49 to Ser-56.	$\vdash$						Gly-53 to Cys-59.			Glv-28 to Val. 34	T				Gln-37 to Lys-50.	
	68 15134	$\dashv$		9 15136	-		78 15137	-353 15138		01 15139	- 246 15140	8 15141	5 15142			3 15143	·	13 15144	30 15145	66 15146	54 15147	89 15148	15149	9 15150	76 15151	8 15152	15153	$\downarrow$	╀	+	4		19 15158
	92 - 268			1 2-319	<del></del>			123		149 - 301	130		1 - 255			3 - 233		100 - 213	73 - 180		161	119	17		160 - 276		45 - 176	$\dagger$	$\dagger$	$\dagger$	+	2 - 151	$\dashv$
	116   5382	_		357   5384	_		83 5385	2386		345 5387	_		49 5390		4	58 5391		21 5392	40 5393	39 5394	60 5395			55 5398			29 5401	1	-	4	- -	$\dashv$	69 5406
	08   958416	+	1	08   859857	_		13 805983	37 859859					33 908449		1	58 859858		56 883321	69 754440	77 967239						04 927077	53 827329	T	$\dagger$	$\dagger$	+	$\dashv$	78   772969
	HNHLB08		HNHLC69	HNHLD08			HNHLD13	HINHLD37		HNHLD8	HNHLE72	HNHLF25	HNHLF33			HNHLF58		HNHLP56	HNHLP69	HNHLP77	HNHLQ36	HNHLQ61	HNHLQ80	HNHLR73	HNHLR91	HNHLS04	HNHI S53	HNHI T49	HNHI V84	TENTIFE V	HNHLW93	HNHLX82	HNHMC78

																	-														
S0053: 1 and S0216: 1.	L0747: 2, S0052: 1 and	50210: 1.	S0216: 2	S0053: 1 and S0216: 1.	S0053: 1 and S0216: 1.	S0114: 1 and S0216: 1.	S0053: 1 and S0216: 1.	H0421: 1 and S0216: 1.	S0216: 2	S0428: 1 and S0216: 1.		S0216: 2	H0265: 1 and S0216: 1.	S0053: 1 and S0216: 1.				H0402: 1 and S0216: 1.	S0216: 2	S0216: 2	S0216: 2	S0216: 2	S0216: 2, L0361: 2 and	L0742: 1.	S0216: 1 and H0445: 1.	S0216: 2		80216: 2	S0053: 1 and S0216: 1.	S0216: 2	S0053: 1 and S0216: 1.
Tyr-6 to Gln-28.	Pro-38 to Leu-47.		Leu-17 to Asp-25.			Lys-7 to Ser-20, Ser-32 to Ser-37.		Arg-21 to Trp-28, Thr-30 to Gly-36.		Phe-1 to Ser-12,	Thr-18 to Thr-27.		Thr-23 to Gln-28.	Arg-3 to Asn-10,	Lys-27 to Leu-32,	Met-35 to Ile-41,	Pro-47 to Asn-54.		Pro-19 to Gly-27.	Glu-25 to Cys-33.		Pro-31 to Gly-36.	Gly-2 to Cys-10.			Asn-7 to Glu-17,	Ser-24 to Lys-31.		Ala-22 to Lys-30.		Ser-31 to Lys-36, Ser-76 to Ile-81.
15159	15160	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	15161	15162	15163	15164	15165	15166	15167	15168		15169	15170	15171				15172	15173	15174	15175	15176	15177		15178	15179		15180	15181	15182	15183
7 - 159	<i>L</i> 65 - 661		32 - 145	100 - 420	216 - 362	240 - 428	1 - 144	3 - 167	205 - 339	132 - 263		123 - 230	2 - 130	30 - 257				2 - 379	1 - 225	24 - 239	113 - 400	3 - 236	115 - 369		165 - 278	1 - 93		146 - 313	73 - 228	11 - 160	1 - 243
5407	5408		5409	5410	5411	5412	5413	5414	5415	5416		5417	5418	5419				5420	5421	5422	5423	5424	5425		5426	5427		5428	5429	5430	5431
876673	784479		791798	927056	937561	967614	916609	791807	925689	790765		937564	789785	780558				953411	859841	958409	883324	761436	952290		761661	784999		786457	918720	754452	771523
HNHMD85	HNHMN25	0000	HNHMQ93	HNHMR04	HNHMR43	HNHMR73	HNHMS77	HNHMS93	HNHMT53	HNHMT54		HNHMT90	HNHMU91	HNHMW83				HNHMX45	HNHMY43	HNHMY45	HNHMY59	HNHMY71	HNHMZ07		HNHMZ59	HNHMZ86		HNHMZ89	HNHNA02	HNHNA69	HNHNB77

S0216: 2	S0053: 1 and S0216: 1.	S0216: 2	S0216: 3	H0271: 3, H0250: 2, H0635:	2, S0216: 2, H0254: 1,	H0638: 1, H0069: 1, H0416:	1, H0090: 1, L0761: 1,	L0800: 1, L0776: 1, L0789: 1	and S0052: 1.	S0052: 1 and S0216: 1.	S0116: 1 and S0216: 1.	S0216: 2	S0053: 1 and S0216: 1.		S0216: 2	\$0216.2	10200 1 00052 1 - 1	20216: 1.	S0216: 1 and H0445: 1.	S0053: 1 and S0216: 1.	S0216: 2	S0216: 2 and L0748: 1.	H0402: 1 and S0216: 1.		S0216: 2	S0216: 2	S0216: 2	S0052: 1, S0428: 1, S0216:	1 and H0444: 1.	S0052: 1 and S0216: 1.	H0551: 1 and S0216: 1.	S0052: 1 and S0216: 1.
				'Asp-1 to Arg-6,	Gln-53 to Ser-60,	Ile-66 to Lys-72,	Glu-76 to Lys-85,	Gly-91 to Ser-99.					Thr-23 to Thr-28,	His-34 to Met-39, Val-69 to Arg-76.	Met-4 to Gly-9, Ser-12 to Len-20	יסי איר מידי זיי	D. 30 4. Cl. 44	Fro-38 to GM-44.				Met-1 to Ala-12.	Tyr-9 to Arg-14,	Glu-22 to Pro-34.	Arg-12 to Tyr-17.	Lys-14 to Pro-19.						Arg-1 to Tyr-6,
15184	15185	15186	15187	15188						15189	15190	15191	15192		15193	15194	15105	56151	15196	15197	15198	15199	15200		15201	15202	15203	15204		15205	15206	15207
146 - 310	234 - 431	3 - 95	190 - 351	2 - 346						226 - 456	1 - 225	44 - 178	3 - 242		3 - 179	147 - 341	144 201	144 - 3/1	140 - 253	54 - 185	122 - 334	179 - 436	272 - 424		82 - 213	1 - 222	1 - 168	2 - 157		122 - 457	164 - 280	28 - 219
5432	5433	5434	5435	5436				•		5437	5438	5439	5440		5441	5442	1 7	3443	5444	5445	5446	5447	5448		5449	5450	5451	5452		5453	5454	5455
779321	775612	966146	771529	780628						761849	963571	923079	859837		775635	756633	70000	839834	782328	775631	784788	968911	920254		859831	859832	927027	959011		923052	922892	915341
HNHNC82	HNHND80	HNHNE11	HNHNE59	HNHNE83						HNHNG73	HNHNI10	HNHN114	HNHNJ08		HNHNK71	HNHNI 70	) Junuary	OCNINIHINIH	HNHNO84	HNHNP80	HNHNP86	HNHNU23	HNHNU27		HNHNV52	HNHNW64	HNHNX04	HNHNX88		HNHOA03	HNHOC03	HNHOD01

																														,	
																										-					
	H0589: 1, S0052: 1 and S0216: 1.	S0053: 1 and S0216: 1.	T0041: 1, S0428: 1 and S0216: 1.	T0041: 1 S0216: 1 and	H0576: 1.			H0457: 1 and S0216: 1.	S0216: 2	-		S0216: 2					S0216: 2	S0216: 2 and L0749: 1.	H0402: 1 and S0216: 1.	H0423: 2, H0486: 1, S0216:	S0053. 1 and S0216. 1		H0254: 1, H0264: 1 and	S0216: 1.	S0216: 2	S0053: 1 and S0216: 1.		S0216: 2			H0402: 1 and S0216: 1.
Leu-27 to Leu-41.			Ser-10 to Ser-15, Glu-44 to Phe-65.	Lys-1 to Thr-18	Leu-28 to Arg-34.	His-46 to Thr 50	Pro-62 to Gln-69.	Gly-19 to Lys-29.	Lys-28 to Cys-37,	Cys-41 to Pro-48,	Leu-61 to Thr-69.	Pro-1 to Ala-6,	Pro-26 to Gly-31,	Arg-50 to Leu-56,	Ser-69 to Gly-76,	Ala-80 to Glu-89.	Tyr-28 to Ala-37.	Cys-15 to Leu-24.	Phe-12 to Arg-20.		I e11-12 to Asn-17	Lys-23 to Gln-29.	Thr-13 to Arg-22,	Arg-78 to Pro-83.	Glu-5 to Pro-11.	Ala-1 to Trp-7,	Lys-21 to Ala-28.	Gly-1 to Trp-12,	Lys-14 to Leu-19,	Lys-52 to Ser-59.	Met-19 to Gly-28, Gly-33 to Ser-51,
	15208	15209	15210	15211				15212	15213			15214					15215	15216	15217	15218	15219		15220		15221	15222		15223			15224
	143 - 319	285 - 422	3 - 197	90 - 326	,			158 - 358	331 - 543			128 - 394					298 - 558	464 - 712	179 - 310	549 - 845	229 - 408		24 - 467		72 - 260	298 - 477		3 - 341			3 - 323
	5456	5457	5458	5459				5460	5461			5462					5463	5464	5465	5466	5467	•	5468		5469	5470		5471			5472
	852995	767329	922028	952291				790934	782316			785004					963562	923072	792328	929616	859826		915462		787562	963539		767877			756593
	HNHOD62	HNHOE53	HNHOF03	HNHOF07				HNHOF92	HNHOG84			9850HNH					HNHOH10	HNHOJ03	HNHOM92	HNHOO16	HNHO025		HNH0074		HNH0087	HNHOP10		9/OOHNH			HNHOS70

														-																		
	S0216: 2	S0216: 2	S0216: 2	S0216: 2	S0053: 1 and S0216: 1.	S0216: 2	S0216: 2	S0216: 2 and L0589: 1.				S0216: 3			S0216: 2	S0216: 2	S0216: 2		S0053: 1 and S0216: 1.						S0216: 2		S0216: 2	S0216: 2	S0053: 2 and S0216: 1.			
Asn-56 to Gly-63, Asn-83 to Tvr-88					Ala-12 to Ser-18,	I IIC-01 (0 1115-07).	Gly-24 to Ser-31.	Gly-1 to Ser-6,	Pro-41 to Gly-48,	Ser-79 to Arg-92,	Pro-104 to Asn-112.	Pro-3 to Ser-15,	Gly-57 to Gly-63,	Ser-89 to His-99.		Ser-38 to His-57.	Lys-1 to Pro-8,	Leu-11 to Phe-20.	Ser-27 to His-32,	Pro-36 to Gly-41,	Gly-49 to His-55,	Trp-84 to Lys-96,	Ser-118 to Gln-130,	Pro-144 to Gly-157.	Arg-21 to Val-38,	Ala-42 to Leu-4/.		Arg-41 to Val-47, Ala-80 to Gln-89.	Gly-1 to Val-8.	Phe-12 to Arg-30,	Arg-43 to His-58,	UIII-UV IV V aI-UV,
	15225	15226	15227	15228	15229	15230	15231	15232				15233			15234	15235	15236		15237						15238		15239	15240	15241			
	246 - 377	310 - 107	258 - 482	100 - 2	28 - 138	2 - 151	1 - 282	367 - 705				2 - 307			33 - 491	30 - 254	68 - 298		106 - 657	•	_	•			28 - 198			38 - 340	59 - 325			
	5473	5474	5475	5476	5477	5478	5479	5480				5481			5482	5483	5484		5485						5486		5487	5488	5489			
	766736	963631	923065	795331	773797	060908	793514	854882				963545			859820	786411	923013		787488						952246		859819	772970	974103			
	HNHOS75	HNHOT10	HNHOT11	HNHOT95	HNHOU20	89NOHNH	HNHOU94	HNHOX09				HNHOX10			HNHOX31	HNHOX89	HNHOZ04		HNHOZ90						HNHPC08		HNHPC36	HNHPC72	HNHPD04			

	S0216: 2	S0216: 2			S0216: 2	S0052: 1 and S0216: 1.			S0428: 1 and S0216: 1.	S0053: 1 and S0216: 1.	S0216: 2		H0250: 3, S3016: 1, H0402:	1, H0625: 1, L0509: 1,	L0791: 1, S0292: 1, H0521:	1, H0436: 1 and S3020: 1.			H0305: 2, H0589: 1 and	H0074: 1.		H0074: 2		H0074: 3	H0074: 2	S0114: 1 and H0264: 1.	S0114: 2 and L0748: 2.		S0114: 1 and H0318: 1.	S0114: 2	S0114: 1, H0306: 1 and L0761: 1.
Leu-83 to Glu-88.	Gln-23 to Lys-33.	His-46 to Cys-51,	Pro-61 to Leu-67,	Thr-76 to Ser-81, Pro-83 to Cys-89.		Ala-1 to Gly-13,	Gln-48 to Ser-60,	His-80 to Ser-85.	Cys-18 to His-23.	Ile-33 to Leu-38.	Ser-33 to Lys-38,	Arg-45 to Thr-51.	Ser-30 to Phe-37,	Ser-39 to Leu-45,	Asp-53 to Thr-60,	Glu-74 to Gly-79,	Gly-86 to Lys-100,	Gln-106 to Ser-124.			Ser-52 to Asn-60.	Gln-1 to Lys-6,	Gly-18 to Asp-24.				Ser-1 to Gln-11,	Ile-36 to Glu-50.	His-4 to Gln-9, Gly-32 to Ser-42.	Leu-5 to Lys-12, Lvs-27 to Arg-32.	Glu-1 to Ser-7, Thr-17 to Ser-24.
	15242	15243			15244	15245			15246	15247	15248		15249						15250			15251		15252	15253	15254	15255		15256	15257	15258
	174 - 389	2 - 322			3 - 311	27 - 458			299 - 484,	185 - 367	233 - 451		101 - 520	,					29 - 280			70 - 297		87 - 182	275 - 192	49 - 174	78 - 227		129 - 338	148 - 375	15 - 200
	5490	5491			5492	5493			5494	5495	5496		5497						5498			5499		5500	5501	5502	5503		5504	5505	5506
	952244	859815			784919	784432	_		859812	783821	934456		935322						739041			723558		536776	677474	925082	683251		666207	531280	907593
	HNHPD07	HNHPD13			HNHPE86	HNHPG61			HNHPG66	HNHPG85	HNHPH29		HOIAE91						HPSAA31			HPSAA50		HPSAA63	HPSAB25	HSATA03	HSATA86		HSATE44	HSATE89	HSATF05

						,																									
S0114: 1 and H0521: 1.	S0114: 1 and H0445: 1.	S0114: 2 and L0748: 1.	S0114: 1 and H0436: 1.	S0114: 1 and H0591: 1.	AR089: 120, AR061: 12	S0114: 2, H0422: 2 and	L0748: 1.	S0114: 1, H0581: 1 and 1.0756: 1	AR051: 5, AR054: 3,	AR050: 0	S0114: 1 and H0272: 1.	S0114: 3	S0114: 2 and H0581: 1.	H0445: 2, S0114: 1 and	L0745: 1.	S0114: 2	S0114: 1 and H0444: 1.	S0114: 1 and H0576: 1.	S0114: 1 and H0318: 1.	S0114: 1 and H0423: 1.	S0114: 2, L0758: 2, L0041: 5	S0114. 2 and S0426. 1	S0114: 1 and H0422: 1		50114.3	20114: 2	H0265: 1 and S0114: 1.	S0114: 2 and H0264: 1.	S0114: 1 and S0053: 1.	S0114: 1 and S0134: 1.	S0114: 2
				Pro-39 to Lys-54.				Val-6 to Leu-23.				Arg-7 to Gly-12.						Thr-38 to Ser-47.	Tyr-14 to Ser-25.			Gln-12 to His.20	Glv-9 to Asn-15.	Glu-29 to Phe-41,	Ara 11 to Car 17	Ser-24 to Cys-29.		Ser-6 to Glu-11.		Leu-26 to Cys-33.	
15259	15260	15261	15262	15263	15264			15265	15266			15267	15268	15269		15270	15271	15272	15273	15274	15275	15276	15277		15778		15279	15280	15281	15282	15283
2 - 205	240 - 404	196 - 315	173 - 418	3 - 437	3 - 164			319 - 582	255 - 389			1 - 180	2 - 256	120 - 305		19 - 123	116 - 214	63 - 242	252 - 422	459 - 325	138 - 266	2-250	86-313		112 - 204	107 - 271	3 - 131	1 - 183	1 - 237	64 - 177	124 - 405
5507	5508	5509	5510	5511	5512			5513	5514			5515	5516	5517		5518	5519	5520	5521	5522	5523	5524	5525		9655	2	5527	5528	5529	5530	5531
781718	716434	781405	900889	677717	866951			765376	888871			713143	985669	659994		524369	689823	732640	796565	732184	531171	866959	757624	<del>,</del>	054055	)	733714	932502	531170	571385	866933
HSATF79	HSATJ56	HSATJ84	HSATM25	HSATM79	HSATQ28			HSATQ76	HSATR17			HSATR27	HSATR32	HSATR76		HSATS23	HSATS29	HSATS56	HSATT96	HSATV34	HSATW22	HSATX46	HSAUA88		HSAI IR 19		HSAUB90	HSAUD05	HSAUD45	HSAUE25	HSAUE40

																		2									
S0114: 1, H0179: 1, S0052: 1 and L0751: 1.	L0766: 3, S0114: 1, H0063: 1, L0761: 1, L0805: 1, L0776: 1, L0527: 1 and L0744: 1.	S0114: 2	L0766: 4, L0740: 4, L0777: 2, S0114: 1 and S0134: 1.	S0114: 1 and H0254: 1.	S0114: 1 and H0551: 1.	S0114: 1 and H0254: 1.	S0114: 3		S0114: 2	S0114: 2		S0114: 2	S0114; 3, H0445; 3, L0002;	1 and L0803: 1.	S0114; 2, H0402: 1 and	L0748: 1.	S0114; 2	S0114: 1, H0087: 1 and	S0114: 1 and S0116: 1.	S0114: 2	S0114: 2	S0114: 1 and S0134: 1.	H0265: 1 and S0114: 1.	S0114: 2, H0439: 1, L0794:	1, L0777: 1 and L0599: 1.	S0114: 2	S0114: 1, H0318: 1 and
Leu-16 to Pro-22.	Lys-18 to Ile-23.		Leu-1 to Cys-6.				His-6 to Ser-12,	Asn-24 to Asn-32.	Arg-31 to Gly-37.	Leu-6 to Gly-12,	Pro-14 to Ser-20, Thr-38 to 11e-46	Ser-1 to Thr-6.	Gly-58 to Gly-66.				His-22 to Thr-28.	Phe-8 to His-16.		Arg-1 to Pro-13, Ala-40 to Gly-49.	Thr-1 to Asp-10.		Asp-25 to Phe-35.	Leu-41 to Phe-47,	Val-51 to Arg-59.	Cys-34 to Thr-39.	
15284	15285	15286	15287	15288	15289	15290	15291		15292	15293		15294	15295		15296		15297	15298	15299	15300	15301	15302	15303	15304		15305	15306
17 - 328	988 - 069	177 - 278	528 - 758	156 - 368	110 - 211	204 - 380	82 - 192		2 - 163	121 - 360		77 - 274	215 - 463		388 - 579		1 - 210	1 - 153	41 - 157	5 - 322	1 - 132	173 - 325	84 - 257	335 - 547			142 - 273
5532	5533	5534	5535	5536	5537	5538	5539		5540	5541		5542	5543		5544		5545	5546	5547	5548	5549	5550	5551	5552		5553	5554
527038	953628	953873	870437	826886	950714	866919	526936		557848	009296		537544	744899		685253		006998	742073	932496	668998	584978	967286	932462	959949		417452	574243
HSAUF18	HSAUG15	HSAUH65	НЅА∪Н69	HSAUI05	HSAUJ26	HSAUL67	HSAUQ94		HSAUT77	HSAUW10		HSAUW71	HSAUZ38		HSAUZ57		HSAVA44	HSAVA61	HSAVB05	HSAVB19	HSAVC41	HSAVC76	HSAVF35	HSAVG81		HSAVH17	HSAVH95

									!																								
L0749: 1.	S0114: 1 and H0445: 1.	S0114: 1 and S0002: 1.	S0114: 1 and H0063: 1.	S0114: 2	L0748: 6, L0749: 2, S0114:	1 and S0426: 1.		S0114: 1, H0402: 1 and	L0521: 1.	S0114: 1 and H0445: 1.	H0556: 1, S0114: 1 and	H0090: 1.	S0114: 2	S0114: 1 and H0179: 1.	S0114: 2	S0114: 1, H0271: 1 and	L0657: 1.	S0114: 2	S0114: 2	S0114: 2	S0114: 2	S0114: 2	S0114: 2	S0114: 1 and H0305: 1.	S0114: 3, L0776: 1, H0521:	1 and H0423: 1.	S0114: 1, H0306: 1 and	L0527: 1.	S0114: 2	S0114: 2	S0114: 2	S0114: 1 and H0580: 1.	S0114: 3 and S0134: 1.
	Lys-1 to Ser-6.	Tyr-11 to Trp-18, Arg-41 to Val-53.			Phe-34 to Cys-39,	Pro-77 to Tyr-82,	Arg-105 to Arg-110.	Lys-8 to Arg-15,	Thr-21 to Lys-36.	Ser-11 to Cys-21.	Gly-1 to Ser-18.	•				Ala-1 to Arg-18.				Lys-22 to Lys-27.	Gln-2 to Thr-13.		Gln-7 to Ser-19.				Glu-39 to Lys-47.					Gln-4 to Lys-16.	Arg-34 to Glu-40.
	15307	15308	15309	15310	15311			15312		15313	15314		15315	15316	15317	15318		15319	15320	15321	15322	15323	15324	15325	15326		15327		15328	15329	15330	15331	15332
	82 - 225	245 - 460	110 - 376	1 - 177	174 - 503			81 - 233		221 - 430	2 - 265		115 - 249	131 - 60	240 - 416	3 - 254		75 - 347	11 - 91	2 - 112	3 - 71	1 - 249	2 - 94	107 - 328	175 - 474		38 - 232		17 - 142	91 - 378	333 - 455	49 - 282	3 - 221
	5555	5556	5557	5558	5559			5560		5561	5562		5563	5564	5565	5566		5567	5568	5569	5570	5571	5572	5573	5574		5575		5576	5577	5578	5579	5580
	715837	717837	279060	739521	714418			935797		920412	574709		531111	531398	964950	574784		522431	936049	827090	574269	526756	888998	920565	577549		925582		967490	920695	574267	744614	574287
	HSAVI44	HSAVI46	HSAVI59	HSAVI77	HSAVL43			HSAVN07		HSAVN17	HSAVO37		HSAV053	HSAVO82	HSAVP10	HSAVQ46		HSAVQ56	HSAVR06	HSAVR74	HSAVS17	HSAVS46	HSAVS76	HSAVT18	HSAVT24		HSAVT95		HSAVU11	HSAVU14	HSAVW44	HSAVX96	HSAVY34

																			ï							-					
S0114: 2 and H0264: 1.	H0159: 1 and S0114: 1.	S0114: 2	H0445: 2, S0114: 1 and L0766: 1.	H0265: 1, S0114: 1, H0421:	1 and L0596: 1.		S0114: 1 and H0318: 1.	S0114: 1, H0638: 1 and	L0748: 1.	S0114: 1, H0444: 1 and	H0543: 1.	S0114: 1 and H0607: 1.	S0114: 2, L0743: 2, L0638:	1, L0800: 1, L0659: 1,	L0758: 1 and L0759: 1.	S0114: 1 and H0444: 1.	S0114: 2		S0114: 1 and H0436: 1.	S0114: 1 and S0053: 1.	S0114: 1, H0444: 1 and H0445: 1.	S0114: 1, H0305: 1 and	L0766: 1.	S0114: 1 and H0445: 1.	S0114: 1, S0426: 1 and	H0521: 1.		S0114: 2	S0114: 1 and S0216: 1.	S0114: 1, S0134: 1 and H0457: 1.	S0114: 2
			Asn-14 to His-21.  -	Asn-18 to Leu-23,	Tyr-41 to Gly-46,	Asp-101 to Asp-110.		Leu-1 to Cys-7,	Phe-55 to Trp-61.	Tyr-35 to Ser-41.		Val-7 to Val-15.	Thr-1 to Lys-12.				Val-10 to His-15,	Val-35 to Leu-40.							Gly-15 to Phe-21,	Asp-79 to Glu-93,	Gly-103 to Pne-111.	Asp-8 to Cys-20, Arg-41 to Asp-58.	Pro-4 to Pro-11.		
15333	15334	15335	15336	15337			15338	15339		15340		15341	15342			15343	15344		15345	15346	15347	15348		15349	15350			15351	15352	15353	15354
36 - 176	239 - 364	158 - 328	16 - 177	116 - 913			58 - 159	328 - 522		150 - 335		2 - 226	478 - 837			2 - 148	187 - 324		189 - 665	104 - 178	147 - 257	5 - 103		237 - 365	3 - 578			117 - 416	2 - 328	122 - 286	162 - 254
5581	5582	5583	5584	5585			5586	5587		5588		5589	5590			5591	5592		5593	5594	5595	5596		5597	5598			5599	2600	5601	5602
\$26928	842039	574192	577281	785988			574223	720535		666842		742713	866874			751429	792893		883825	522474	577267	666841		967489	720536			574172	900962	579044	924900
HSAVY58	HSAVZ35	HSAVZ65	HSAWA25	HSAWC89			HSAWG75	HSAWH47		HSAWI18		HSAWI50	HSAWJ36			HSAWJ93	HSAWL80		HSAWN67	HSAWT91	HSAWU96	HSAWV18		HSAWY11	HSAXB47			HSAXB84	HSAXB95	HSAXC60	HSAXD03

							126650, 126650, 150240, 180105, 222800, 246900	602421, 602421, 602421																			
							7q31.1-q31.2																				
S0114: 1 and H0341: 1.	S0114: 4	S0114: 2 and L0754: 1.	S0114: 2	S0114: 2 and L0766: 1.	S0114: 1 and H0090: 1.	S0114: 2	S0114: 2		S0114: 1 and H0063: 1.	S0114: 2	S0114: 1, L0748: 1 and	H0445: 1.	S0114: 2	S0114: 2				S0114: 2 and S0116: 1.	S0114: 2	S0114: 2	S0114: 2	S0114: 2, S0216: 2 and S0134: 1.	S0114: 1, L0586: 1 and H0423: 1.	H0186: 1 and S0114: 1.	S0114: 2	S0114: 2 and H0581: 1.	L0748: 2, S0114: 1, H0581:
Pro-11 to Thr-20.		Lys-12 to Leu-17, Glu-53 to Cys-61.	Gly-29 to Asp-36.			Ser-40 to Ser-47.				His-37 to Pro-51.	Lys-26 to Ser-32.		Thr-30 to Ala~36.	Ile-18 to Pro-25,	Val-33 to Gln-42,	Phe-46 to Val-51,	Pro-82 to Asp-97.	Gly-14 to His-26.			Asp-27 to Ser-34.	Pro-34 to Lys-47.	Gln-32 to Asn-37.	Ile-1 to Leu-11, Glu-31 to Thr-37.		Thr-3 to Arg-12, Arg-29 to Glu-35.	Leu-3 to Ser-9,
15355	15356	15357	15358	15359	15360	15361	15362		15363	15364	15365		15366	15367				15368	15369	15370	15371	15372	15373	15374	15375	15376	15377
155 - 283	97 - 2	178 - 396	177 - 332	34 - 222	190 - 297	3 - 236	16 - 105		340 - 456	59 - 211	38 - 184		1 - 138	1 - 291	-,			3 - 254	1 - 150	167 - 322	120 - 221	188 - 445	419 - 547	2 - 130	45 - 248	194 - 319	192 - 521
5603	5604	5605	9095	2607	2608	2609	5610		5611	5612	5613		5614	5615	-			5616	5617	5618	5619	5620	5621	5622	5623	5624	5625
959939	575543	574274	526777	924899	574165	574280	953871		574159	531114	964753		866840	866837		-		526939	574173	754061	784470	574286	726053	727491	713784	725673	959441
HSAXD08	HSAXD18	HSAXD73	HSAXD75	HSAXF03	HSAXG18	HSAXG30	HSAXI07		HSAXI47	HSAXI62	HSAXJ25		HSAXL83	HSAXM33				HSAXM34	HSAXM44	HSAXM68	HSAXM91	HSAXN51	HSAXO52	HSAX053	HSAXO65	HSAXP51	HSAXR08

1 and L0367: 1.	S0114: 1 and H0305: 1.	S0114: 2	S0114: 2	S0114: 2	S0114·1 H0254·1 H0255·	1 and S0002: 1.	S0114: 1, L0309: 1 and	H0445: 1.	S0114: 1 and H0436: 1.		S0114: 1, H0318: 1, L0803:	50114. 3	50114: 2	S0114: 4, H0556: 1 and	HU18/: 1.	S0114: 1 H0305: 1 and	H0589: 1.	S0114: 1 and H0305: 1.				S0114: 2	S0114: 1 and H0444: 1.	S0114: 2 and L0749: 1.	S0114: 2 and H0591: 1.	S0114: 1 and S0134: 1.	S0114: 1 and H0264: 1.	S0114: 1 and H0318: 1.	S0114: 2	S0114: 1, S0002: 1, S0426: 1 and H0543: 1.
Gly-105 to Ala-110.	Pro-16 to Lys-21.	Lys-30 to Phe-41.	Gly-1 to Ala-6.	Ala-19 to Gly-8,			Glu-44 to Ser-55,	Thr-63 to Lys-68.	Lys-2 to Arg-7,	Gin-13 to Trp-24, Ser-37 to Thr-44.				Arg-22 to Gly-28,	F10-41 to F10-48, G1v-56 to Ser-67.	Ala-20 to Glv-36		His-1 to His-6,	Thr-26 to Ser-31,	Pro-92 to Val-97,	Gly-114 to Gly-122.	Ser-24 to His-34.	Ser-1 to Asp-30.				Arg-8 to Pro-16, Leu-19 to Asn-28.		Lys-8 to Cys-13.	Gln-5 to Leu-13.
	15378	15379	15380	15381	15382		15383		15384		15385	15206	13380	15387		15388		15389				15390	15391	15392	15393	15394	15395	15396	15397	15398
	33 - 362	2 - 148	1 - 342	145 - 522	145 - 339		170 - 376		147 - 374		219 - 437	75 775	C/7 - C/	3 - 206		451 - 687		3 - 443				175 - 357	153 - 266	266 - 448	2 - 136	70 - 237	49 - 291	3 - 116	86 - 232	276 - 434
	5626	5627	5628	5629	5630		5631		5632	:	5633	1275	2024	5635		5636		5637				5638	5639	5640	5641	5642	5643	5644	5645	5646
	866831	715896	650857	751139	856883		663910		705409		723425	203277	74004/	971427		731434		881282				681730	950669	720352	765847	951025	920778	719241	959486	471037
	HSAXR83	HSAXS44	HSAYA60	HSAYA80	HSAYA95		HSAYC17		HSAYC39		HSAYC84	CHOANGE	113A I 002	HSAYH09		HSAYH38		HSAYK03				HSAYK26	HSAYK79	HSAYL46	HSAYL64	HSAYL72	HSAYL93	HSAYM75	HSAYM91	HSAYN79

												٠							- "												
			)766:	ים																											
S0114: 2	S0114: 2	S0114: 2 and L0794: 1.	S0114: 1, L0772: 1, L0766:	S0114: 1, H0255: 1 and H0423: 1	S0114: 1 and H0576: 1		S0114: 2	S0114: 2	S0114: 3	S0114: 2	S0114: 2	S0114: 3 and H0402: 1	S0114: 3	S0114: 2	S0114: 2	AR050: 2, AR054: 1,		S0114: 2		S0114: 1 and S0052: 1.	S0114: 2	S0114: 1 and H0445: 1.	S0114: 2		S0114: 1 and H0318: 1	S0114: 1 and H0402: 1	S0114: 1 and H0521: 1	S0114: 2	S0114: 1 and H0421: 1	S0114: 2	H0589: 2 and S0114: 1
Pro-21 to Gln-31.			Ser-8 to Val-13.	Ser-34 to Met-46.	Gly-1 to Ser-6,	Ala-32 to Asp-44.	Glu-46 to Leu-51.			Pro-28 to Val-34.			Thr-1 to Ala-6.			His-10 to Ile-16,	Arg-27 to Ser-34,	Arg-44 to Asn-49,	Tyr-77 to Cys-89.		Leu-75 to Leu-§1.		Glu-1 to His-6,	Ser-35 to Ala-41, His-52 to Cys-59.		Arg-1 to Gln-8.				Gly-20 to Glu-31.	Phe-42 to Glu-49.
15399	15400	15401	15402	15403	15404		15405	15406	15407	15408	15409	15410	15411	15412	15413	15414				15415	15416	15417	15418		15419	15420	15421	15422	15423	15424	
156 - 329	75 - 191	3 - 170	242 - 433	87 - 257	1 - 189		27 - 206	92 - 220	166 - 270	148 - 285	85 - 231	2 - 238	196 - 366	122 - 286	161 - 313	77-517				2 - 247	3 - 257	306 - 425	1 - 180		24 - 131	165 - 347	27 - 191	1 - 117	158 - 370	214 - 357	2 - 187
5647	. 5648	5649	5650	5651	5652		5653	5654	5655	2656	5657	5658	5659	2660	5661	2995				5663	5664	5665	9995		2995	2668	6995	2670	5671	5672	5673
745703	675897	681725	730688	856909	818998		964994	666442	702423	712326	757577	866814	509611	790196	692708	887420		<del></del>		725704	787070	719615	927161		727729	730784	927167	781717	847802	796044	927174
HSAY071	HSAYR35	HSAYS26	HSAYS54	HSAYW12	HSAYW75		HSAZC11	HSAZC18	HSAZC33	HSAZC41	HSAZC69	HSAZC70	HSAZC72	HSAZC91	HSAZD30	HSAZE47				HSAZE66	HSAZF25	HSAZF47	HSAZG04		HSAZG53	HSAZH64	HSAZI04	HSAZK83	HSAZN07	HSAZP34	HSAZQ04

											668009				107470, 107470,	107470, 121014,	142470, 156225,	164200, 164200,	207800, 601316,	601410, 601757,	007700	-								
											8q11				6q23															
S0298: 1 and S0052: 1.	S0298: 2	S0298: 1 and H0402: 1.	S0298: 1, H0581: 1 and H0542: 1.	H0641: 2, S0002: 2, L0766:	2, L0438: 2, L0439: 2,	H0657: 1, H0638: 1, H0637:	1, L0763: 1, L0768: 1,	L0794: 1, L0655: 1, H0521:	1, H0522: 1, L0779: 1,	L0777: 1 and S0026: 1.	H0551: 2	H0341: 1, H0402: 1, S0005:	1, H0551: 1 and L0766: 1.	H0551: 2	AR061: 1, AR089: 0	S0212: 1, H0551: 1 and	L0366: 1.				H0341: 1 and H0551: 1.		H0551: 2	H0069: 1 and H0551: 1.	:	H0457: 4, H0522: 2 and	H0551: 1.			H0218: 3
Asp-1 to Gln-7, Arg-25 to Ile-32, Gln-37 to Gly-46.				Asn-28 to Ser-35,	Arg-58 to Pro-66.	<b>)</b>						Asp-11 to His-16,	Asn-41 to Ser-47.	Leu-12 to Gly-31.	Pro-26 to Gly-32.			·			Ser-7 to Asp-12.	Arg-30 to Ser-41.		Ser-79 to Gly-86,	Pro-93 to Asp-99.	His-3 to Ala-10,	Gly-22 to Glu-29,	Pro-53 to Pro-59,	Leu-106 to Glu-111, Glu-119 to Asn-125.	
15426	15427	15428	15429	15430							15431	15432		15433	15434						15435		15436	15437		15438				15439
43 - 180	130 - 195	2 - 100	412 - 215	94 - 291							52 - 132	215 - 385		2 - 334	2 - 286		-		-		142 - 327		60 - 191	1 - 399		23 - 403				96 - 326
5674	5675	5676	2677	5678							5679	2680		5681	5682						5683		5684	5895		2686				5687
927420	727597	964887	690390	676362							068899	920174		883699	660053						727842		870939	783730		68/0/6				792728
HSMBA04	HSMBA53	HSMBB53	HSMBD29	HSQFR23							HSYAD19	HSYBC05		HSYBF51	HSYBL15						HSYBL77		HSYCX75	HSYDF85		HSYDP04				HT1SC71

																			16p13.13-p13.12 186580, 278760, 601313											
H0139: 2	H0220: 2, L0748: 1 and	L0749: 1.	H0220: 1 and S0053: 1.	H0220: 2	H0556: 1 and H0220: 1.	H0220: 2	H0140: 3	H0140: 2 and L0369: 1.	H0159: 2, H0222: 1 and H0422: 1.	H0222: 1 and H0159: 1.	H0223: 1 and H0159: 1.	H0222: 1, H0159: 1, H0179:	1 and S0053: 1.	H0222: 1 and H0159: 1.	H0159: 2	H0222: 1 and H0264: 1.		:	H0222: 1 and H0159: 1.	H0222: 1 and H0159: 1.	H0222: 1, S0428: 1 and	L0601: 1.		H0222: 3, H0576: 1 and	L0779: 1.	AR050: 48, AR054: 34, AR051: 20	H0141: 5, H0585: 5, L0805:	2, H0638: 1, H0606: 1,	L0369: 1, L0761: 1, L0800:	1, L0771: 1, L0768: 1, L0766: 1 and L0806: 1.
Gln-59 to Lys-66.	Ser-34 to Ala-40,	Asn-61 to Ala-70.				Lys-12 to Ile-25.	Tyr-1 to Glu-19.	Arg-2 to His-13.			Arg-14 to Lys-30.			Leu-18 to Gln-25.		Val-3 to Leu-9,	Lys-14 to Thr-19,	Trp-27 to Ser-32.	Phe-27 to Arg-34.		Gly-7 to Met-20,	Pro-28 to Leu-33,	Met-52 to Cys-58, Arg-92 to Ser-97.			Gly-1 to Val-16, Thr-114 to Arg-119.				
15440	15441		15442	15443	15444	15445	15446	15447	15448	15449	15450	15451		15452	15453	15454			15455	15456	15457			15458		15459				
66 - 263	201 - 443		231 - 467	120 - 320	87 - 320	171 - 305	57 - 209	17 - 175	266 - 412	165 - 266	88 - 201	67 - 189		3 - 365	991 - 08	19 - 210			601 - 912	181 - 312	207 - 527	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		127 - 258		133 - 846				
5688	5689		5690	5691	5692	5693	5694	5695	9699	2692	8695	2699		5700	5701	5702			5703	5704	5705			5706		5707			•	
518444	522773		932853	522759	870913	522753	973645	527913	509190	530750	601009	534887		932557	527779	954360			958400	222600	791423			522532		887174				
HT2AB63	HT2SA18		HT2SF05	HT2SF45	HT2SG56	HT2SG66	HT3AG28	HT3AH13	HT3BA84	HT3BB93	HT3BC30	HT3BF34		HT3BG05	HT3BG34	HT3SA07			HT3SB56	HT3SF46	HT3SF93			HT3SG30		HT4CF32				

																							****							
H0585: 6 and H0141: 2.	H0585: 8 and H0141: 3.	H0585: 2	H0585: 2	H0585: 1 and H0576: 1.	H0585: 17, H0141: 7,	L0804: 4, H0641: 2, L0769:	2, L0800: 2, L0803: 2,	L0809: 2, L0731: 2, L0763:	1, L0761: 1, L0773: 1,	L0789: 1, L0747: 1, L0777: 1	and H0422: 1.	H0585: 9	H0224: 3	H0224: 1, H0160: 1 and	U0005: 0 U0004: 1 24	H0160: 1.	H0167: 4	H0167: 3	H0167: 2	H0584: 10				H0584: 9, H0167: 2, H0271:	1 and H0416: 1.	H0584; 2		,	H0584; 4	H0069: 2
Val-18 to Thr-23, Val-42 to Trp-49, Glu-65 to Tyr-70.				Leu-2 to Pro-8.	Thr-14 to Arg-23,	Gly-37 to Phe-50.						Gly-115 to Arg-120.								Arg-9 to Trp-20,	Met-27 to Gly-33,	Gln-52 to Ile-57,	Gln-60 to Glu-69.	Phe-1 to Glu-11,	Gly-17 to Arg-41.	Arg-3 to Ala-10,	Pro-21 to 1nr-36,	Gly-38 to Gly-51, Arg-58 to Gly-64.	Ala-32 to Glu-38, Gln-74 to Glv-85	Gln-23 to Asn-29.
15460	15461	15462	15463	15464	15465							15466	15467	15468	15460	10403	15470	15471	15472	15473				15474		15475			15476	15477
178 - 489	195 - 449	2 - 127	2 - 178	1 - 87	6 - 245							38 - 526	118 - 399	50 - 235	7777		3 - 167	2 - 133	2-88	12 - 488			-	268 - 435		1 - 354			3 - 335	131 - 244
5708	5709	5710	5711	5712	5713					_		5714	5715	5716	5717		5718	5719	5720	5721				5722	0000	5/23			5724	5725
974117	805558	686279	952837	935056	870887							909971	522502	531561	870055		960050	921539	728624	952359				531205	00000	/39092			697721	733636
HT4CL83	HT4CM20	HT4FN75	HT4FS23	HT4FV06	HT4GF30							HT4GJ85	HT4SB45	HT4SE86	HTATR12	71711111	HT5AD70	HT5AH76	HT5AI96	HT5EA69				HTSEU04	Contracti	HISEUS9			HT5FD31	HTAAA68

	•					-																									
				22																											
H0069: 2 and L0592: 1.		H0069: 5	H0402: 2, L0529: 2 and H0069: 1.	H0069: 2	H0069: 3 and H0635: 1.		H0069: 3 and H0556: 1.	H0069: 3	H0069: 3	H0069: 5	H0069: 2		H0069: 5	H0069: 3	H0069: 2	H0069: 3	H0069: 4	H0069: 2	H0069: 9	H0069: 2	H0069: 2 and H0318: 1.	H0069: 1 and H0581: 1.		-	110000	H0069: 3	H0069: 1, S0144: 1 and S0142: 1.	H0069: 8	H0069: 1 and H0635: 1.	H0069: 1 and H0635: 1.	H0069: 3 and H0635: 2.
Glu-12 to Thr-22,	Arg-28 to Ala-33, Leu-45 to Thr-50.	Gly-1 to His-6.		Glu-13 to Glu-20.	Cys-16 to Arg-25,	Arg-33 to Leu-41.		Arg-10 to Arg-17.			Met-1 to Thr-6,	Pro-21 to Ser-27.	Gln-11 to Ser-16.		Glu-2 to Lys-26.		Lys-22 to Pro-28.	Arg-13 to Arg-18.	Arg-1 to Gln-7.	Ala-1 to Arg-9.		Ser-9 to Ser-14,	Lys-24 to Ser-30,	Cys-34 to Ile-39,	Lys-10 to Lea-00.		Pro-60 to Lys-68.	Gln-16 to Ile-21.	Pro-7 to Thr-27.		
15478		15479	15480	15481	15482		15483	15484	15485	15486	15487		15488	15489	15490	15491	15492	15493	15494	15495	15496	15497			17.400	15498	15499	15500	15501	15502	15503
1 - 315		90 - 329	24 - 182	25 - 135	24 - 152		236 - 415	2 - 274	76 - 129	57 - 248	3 - 122		2 - 166	39 - 146	103 - 288	95 - 259	113 - 316	126 - 329	2 - 220	142 - 14	124 - 177	75 - 344			, ,,,,		3 - 251	3 - 89	96 - 263	280 - 408	394 - 582
5726		5727	5728	5729	5730		5731	5732	5733	5734	5735		5736	5737	5738	5739	5740	5741	5742	5743	5744	5745			2447	2/40	5747	5748	5749	5750	5751
960479		932913	578537	629270	518454		952304	508527	870884	961231	719422		535295	575304	960936	509675	535399	508952	960931	508366	518355	940153	<del></del>		700444	508441	835945	954400	925571	974314	975073
HTAAA74		HTAAC05	HTAAG63	HTAAP36	HTAAP96		HTAAQ82	HTAAU76	HTAAU78	HTAAW11	HTAAW46		HTAAW81	HTAAY89	HTABE51	HTABE93	HTABF52	HTABF72	HTABG03	HTABG44	HTABG83	HTABG87			COLCLATIA	HIABJ93	HTABK73	HTABN17	HTACL04	HTACN31	HTACN96

								-																					
12q24.3-qter														-															
H0069: 2 and H0543: 1.	L0766; 2, H0069; 1 and H0625; 1.	H0069; 1 and H0635: 1.	H0069: 2	H0069; 2	S0052: 2 and H0069: 1.	H0069: 2	H0069: 1 and S0428: 1.		H0069: 1 and H0063: 1.	H0069: 1 and H0264: 1.	H0069: 2	H0069: 2	H0069: 1, H0635: 1 and	L0780: 1.		H0069; 2	H0069; 2	H0069: 2		H0069: 1 and H0635: 1.	H0069: 2	H0069: 2				H0069: 2	H0069: 2 and H0556: 1.	H0069: 1 and S0142: 1.	H0069: 2
Thr-1 to Met-32.	Glu-67 to Arg-72.	Gly-10 to Gly-15, Tyr-22 to Lys-31, Glu-70 to Phe-76.	Pro-15 to Gly-22.					Cys-32 to Asn-38.	Arg-22 to Thr-28, Pro-41 to Gln-48	Cys-14 to Glu-30.	Leu-23 to Ser-29.		Gln-1 to Pro-6,	Ser-15 to Glu-30,	Ile-37 to Tyr-42.	Arg-1 to Glu-7.		Pro-7 to Lys-12,	Pro-27 to Gly-39.	Ser-45 to Ser-54.	Thr-56 to Thr-63.	Ser-9 to Ala-16,	Lys-19 to Gln-31,	Pro-63 to Trp-68,	Pro-90 to Gly-98.	:	Phe-8 to Cys-15.	Ser-40 to Phe-45, Pro-51 to Arg-58.	
15504	15505	15506	15507	15508	15509	15510	15511	19348	15512	15513	15514	15515	15516			15517	15518	15519		15520	15521	15522				15523	15524	15525	15526
3 - 101	200 - 433	2 - 271	57 - 122	2 - 181	119 - 271	63 - 143	31 - 207	161 - 316	3 - 287	290 - 445	62 - 199	1 - 297	3 - 170			44 - 130	52 - 189	2 - 238		2 - 172	58 - 264	29 - 391				306 - 461	190 - 432	56 - 241	1 - 69
5752	5753	5754	5755	5756	5757	5758	5759	9656	2760	5761	5762	5763	5764			5765	5766	2925		5768	5769	2770				5771	5772	5773	5774
537439	268997	918250	537433	537435	537377	504612	209777	870869	961560	531492	557836	507146	967577	<u> </u>		932470	955245	964944		870820	537427	773764		•		537423	550342	734996	537418
HTACP19	HTACP52	HTACR92	HTACS45	HTACS46	HTACT29	HTACU21	HTACU80		HTACW17	HTACY32	HTACY49	HTADA22	HTADC11			HTADH05	HTADH61	HTADI11		HTADI93	HTADJ25	HTADJ36				HTADK40	HTADM61	HTADQ83	HTADQ93

H0069: 2	H0069: 2	H0069: 2	H0069: 2	H0635: 2 and H0069: 1.	H0069: 2 and H0635: 1.	H0069: 2	H0069: 1, H0457: 1 and S0426: 1	H0069: 2	H0069: 2	H0069: 3	H0069: 1 and H0635: 1.	H0069: 1 and H0264: 1.	H0069: 1, H0635: 1 and	LU323: 1.	H0069: 4	H0584: 2, H0265: 1 and H0069: 1.	H0069: 5	H0069: 2	H0069: 1 and H0581: 1.		H0069: 2, L0794: 1, L0803:	1 and L0758: 1.		H0069: 2	H0069: 2	AR061: 7, AR089: 5 H0069: 3, L0794: 1, L0803:	1 and L0758: 1.
			Glu-1 to Ile-6.		His-1 to Arg-20.	Glu-1 to Pro-7.				Asp-10 to Asp-16, Gln-29 to Ala-35.		Ser-1 to Glu-10, Ser-53 to Phe-59.			Ile-1 to Gln-7.		Arg-65 to Asp-70.	Ala-29 to Tyr-45, Gly-53 to Ala-60.	Pro-38 to Trp-51,	Asp-53 to Gly-59, Thr-70 to Trp-78.	Gln-1 to Gly-7,	Pro-16 to Asp-28,	Arg-66 to Asp-73.	Asp-68 to Gly-80.		Lys-14 to Glu-32.	
15527	15528	15529	15530	15531	15532	15533	15534	15535	15536	15537	15538	15539	15540	,	15541	15542	15543	15544	15545		15546			15547	15548	15549	
73 - 225	3 - 101	188 - 319	217 - 372	234 - 377	3 - 428	303 - 494	1 - 147	3 - 104	71 - 205	126 - 254	2 - 298	311 - 568	169 - 402		243 - 329	28 - 462	209 - 487	107 - 322	167 - 454		359 - 93			46 - 303	68 - 21	25 - 366	
5775	2776	5777	5778	5779	5780	5781	5782	5783	5784	5785	2786	5787	5788		5789	2790	5791	5792	5793		5794			5795	5796	5797	
934435	537428	761591	927101	974303	930978	773763	958220	537374	537421	537373	969532	296292	838803		971526	780986	881092	934570	868433		973085			926292	744409	944409	
HTADR41	HTADW69	HTAED78	HTAEF32	HTAEH74	HTAEJ77	HTAEK78	HTAEL90	HTAE084	HTAER18	HTAES82	HTAET86	HTAEU76	HTAEV65	TO CARACTA CONTRACTA	HIAEW87	HTAEW95	HTAEX66	HTAFA06	HTAFA66		HTAFC37			HTAFC76	HTAFD63	HTAFE69	

H0069: 1 and H0090: 1.	H0069: 2	H0069: 2	H0069: 1, H0635: 1 and S0216: 1.	H0069: 1 and H0635: 1.	H0069: 1 and H0635: 1.	H0635: 2 and H0069: 1.	H0635: 4	H0556: 1, H0635: 1 and S0474: 1.	H0271: 2, H0255: 1 and H0635: 1.	H0635: 3	***			H0635: 2 and L0748: 1.	H0635: 2 and S0116: 1.		H0635: 2 and L0766: 1.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S0114: 1 and H0635: 1.	H0635: 1 and H0271: 1.		H0635: 2 and H0069: 1.	H0635: 1 and H0422: 1.	H0635: 3						
	Trp-36 to Tyr-58, Ser-74 to Asp-80.			Gln-2 to Leu-10.			Gln-17 to Gly-23.		Gly-7 to Gly-16.	Ala-1 to Gln-11,	Lys-30 to Lys-40,	Arg-52 to His-73,	Asp-109 to Leu-114.	Lys-46 to Arg-52.	Asp-54 to Ser-63,	361-03 to GIII-79.	Lys-13 to Leu-20, $c_{2\pi}$ 30 to $\lambda_{2\pi}$ 46	Ser-39 to Arg-40.	Cys-37 to His-45.	Pro-7 to Gly-15,	Pro-37 to Gly-42.	Asn-52 to Gln-59.		Val-2 to Pro-7,	Ala-17 to Gly-24,	Arg-26 to Leu-32,	Cys-36 to Arg-49,	Arg-56 to Gly-67,	Asn-69 to Trp-76,	Gly-79 to Pro-89, Tvr-108 to Ile-113.
15550	15551	15552	15553	15554	15555	15556	15557	15558	15559	15560				15561	15562		15563		15564	15565		15566	15567	15568						
134 - 232	99 - 338	226 - 393	23 - 283	3 - 239	137 - 304	258 - 371	164 - 397	155 - 334	1 - 198	1 - 363				294 - 473	2 - 238		130 - 435	101	104 - 280	2 - 292		243 - 494	249 - 458	3 - 359						
5798	5799	2800	5801	5802	5803	5804	5805	2806	5807	2808				5809	5810	,,,,,,	2811	0.00	5812	5813	į	5814	5815	5816						
787604	933028	896/9/	974338	870854	870853	974060	963125	925699	936117	963182				926501	847777	020700	870058	270270	798596	860919		934013	920332	974030						<del> </del>
HTAFE90	HTAFF11	HTAFF76	HTAFG52	HTAFG58	HTAGA71	HTAGB89	HTAGC91	HTAGI29	HTAGI53	HTAGL61				HTAGN04	HTAGV46	OF THE CALL	HIAGV49	TTT A COTT	HIAGZII	HTAHB17		HTAHJ49	HTAHK12	HTAHL28						-

																										•••••			
																		•											
AR061: 314, AR089: 160 H0635: 2 and L0439: 2.	H0635: 2 and H0556: 1.	H0556: 1, H0635: 1 and	H0543: 1.		H0635: 2	,		H0635: 2	H0069: 1 and H0635: 1.	H0457: 2, H0635: 1 and	H0445: 1.	H0635: 3	H0069: 1 and H0635: 1.			H0635: 2, L0746: 2, L0770:	1, L0769: 1, L0659: 1 and	L0745: 1.	H0635: 2	L0749: 5, H0635: 1, S0426:	1 and L0748: 1.	H0069: 2 and H0635: 1.	H0069: 2, H0635: 1 and H0179: 1.	H0556: 3, H0069: 1, H0635:	1, H0318: 1, S0344: 1 and	L0766: 1.	H0635: 1 and H0542: 1.	H0069: 1 and H0635: 1.	H0635: 2
Leu-14 to Lys-20, Glu-28 to Ala-67, Pro-81 to Gln-88, Leu-128 to Lys-137.		Gly-1 to Cys-17,	His-59 to Pro-69,	Arg-82 to Ile-88.	Leu-8 to Ser-16,	Ser-25 to Glu-32,	Gly-71 to Lys-79.			Ser-7 to Gln-18,	Pro-44 to Asp-51.	Asn-6 to His-12.	Cys-12 to Pro-17,	Arg-45 to Cys-54,   Glu-58 to IIe-67	Val-100 to Gln-105.					Asn-10 to Ser-16.	2 20	Glu-32 to Ser-38.		Leu-1 to Gly-8,	Ser-74 to Gly-84,	Pro-97 to Gly-108.	Pro-8 to Val-15.		Arg-9 to Gly-15, Ser-57 to Gln-68.
15569	15570	15571			15572			15573	15574	15575		15576	15577			15578			15579	15580		15581	15582	15583			15584	15585	15586
139 - 663	2 - 202	317 - 580			5 - 289			248 - 520	267 - 380	203 - 358		9 - 218	3 - 380			3 - 449			2 - 118	622 - 819		200 - 403	2 - 214	22 - 363			282 - 470	19 - 249	3 - 281
5817	5818	5819			5820			5821	5822	5823		5824	5825			5826			5827	5828	0000	5879	5830	5831			5832	5833	5834
908949	974300	923115			870831			839505	922772	934062		963183	960795			926747			965835	930951	1,127,00	920341	974062	870785			870815	921729	870804
HTAHL45	HTAHL76	HTAHN29			HTAHQ22			HTAHQ94	HTAHR03	HTAHR06		HTAHS10	HTAHS21			HTAHV04			HTAIB11	HTAIC05	TIT A TIT	H1AID04	HTAIF70	HTAIF78			HTAIK75	HTAIQ39	HTAIQ75

229600, 264300, 600542, 602014, 602088																														
9q11-q22																														
L0600: 2, H0635: 1 and H0264: 1.	H0635: 1 and H0271: 1.	H0069: 1 and H0635: 1.	H0635: 2	H0635: 3 and H0069: 1.	H0635: 2	H0635: 2	H0635: 3	H0075: 1 and H0521: 1.				H0486: 1 and H0477: 1.	H0477: 2 and L0041: 1.	H0556: 1 and H0477: 1.	H0635: 1 and H0477: 1.	H0457: 1 and H0477: 1.	<b></b>	H0581: 2, H0477: 1, H0272:	1 and L0766: 1.	H0069: 2, H0635: 1 and	H0477: 1.		H0477: 1 and H0422: 1.	S0134: 2 and L0594: 1.	S0134: 2	S0134: 1 and H0341: 1.		S0134: 2	S0134: 2	
Thr-33 to Phe-38.	Ser-30 to Asp-36.	Pro-4 to Leu-14, Ser-43 to Pro-49.	His-18 to Cys-24.	His-59 to Leu-66.				His-1 to Glu-14,	Thr-22 to Ser-28,	Pro-36 to Val-44,	Gln-80 to Asp-91.	Asp-1 to Gly-9.	Ser-62 to Glu-75.		Leu-19 to His-29.		Pro-27 to Gly-34.	Gly-4 to Tyr-10.		Val-7 to Gly-19,	Thr-51 to Thr-56,	Ser-62 to Gly-72.	Asn-35 to Ser-40.		Ile-12 to Thr-17.	Ile-1 to Phe-13,	Leu-16 to Arg-33, Ser-45 to Ser-50.		Gly-1 to Pro-13,	Lys-20 to Val-33, Pro-74 to Glu-84.
15587	15588	15589	15590	15591	15592	15593	15594	15595				15596	15597	15598	15599	15600	19349	15601		15602			15603	15604	15605	15606		15607	15608	
106 - 327	23 - 205	63 - 368	282 - 452	152 - 355	160 - 2	2 - 160	183 - 380	2 - 478	-			3 - 209	3 - 227	51 - 233	506 - 694	2 - 169	390 - 638	415 - 672		236 - 520			46 - 180	96 - 308	2 - 298	2 - 175		31 - 126	1 - 327	
5835	5836	5837	5838	5839	5840	5841	5842	5843				5844	5845	5846	5847	5848	9597	5849		5850			5851	5852	5853	5854		5855	5856	
870814	968234	870874	926731	975260	914899	958057	975309	715044				870742	575842	772242	714359	889311	971582	927842		975317			576013	574100	935798	682040		578797	578804	
HTAIR54	HTAIU80	HTAIV79	HTAJG31	HTAJG65	HTAJI01	HTAJN08	HTAJR80	HTBAA95				HTDAA07	HTDAC37	HTDAC77	HTDAE25	HTDAE43		HTDAF65		HTDAG18			HTDAI42	HTGAL23	HTGAM06	HTGAM26		HTGAM42	HTGAN20	

																								300031, 300044, 300048, 300048,
																								Xq28
S0134: 1, T0042: 1 and H0543: 1.	S0134: 2	S0134: 1 and H0271: 1.	S0134: 1, L0623: 1, H0087:	S0134: 1 and H0436: 1.	S0134: 3	S0134: 1 and H0318: 1.	S0134: 1 and H0179: 1.	S0134: 1, H0581: 1 and	H05/6; 1.	S0134: 1 and H0522: 1.	S0134: 2	S0134: 1, T0041: 1 and	L0748: 1.	S0114: 1 and S0134: 1.	H0341: 2, S0134: 1, L0759:	TOTAL 2 00124 4 1	LU/48: 3, SU134: 1 and H0271: 1.	S0134: 1 and S0002: 1.	S0134: 1, H0581: 1 and H0543: 1.	S0134: 1, L0779: 1 and H0543: 1	S0134: 1 and S0116: 1.	S0278: 2 and S0134: 1.	S0134: 1 and H0305: 1.	S0134: 1 and H0354: 1.
Arg-41 to Asn-46, Pro-96 to Lys-102, Ala-122 to Glu-127.	Glu-17 to Ile-29.	Gly-1 to Cys-8, Glu-11 to Gly-19.	Gly-15 to Glu-20,	O13-24 to Cys-50.	Pro-11 to Thr-19.		Thr-1 to Ser-8,	Ser-35 to Thr-42.						Ala-22 to Phe-28.	Val-95 to Arg-101.	0 22 4- 1 45	Ser-33 to Leu-45.			Pro-18 to Ala-33.	Glu-9 to Cys-15, His-45 to Arg-53.		Arg-37 to Leu-42.	
15609	15610	15611	15612	15613	15614	15615	15616	15617	15618	15619	15620	15621		15622	15623	15501	13024	15625	15626	15627	15628	15629	15630	15631
3 - 569	67 - 216	1 - 291	258 - 458	1 - 153	241 - 420	2 - 172	201 - 422	46 - 294	177 - 310	2 - 208	345 - 157	13 - 183		24 - 332	287 - 613	104 100	184 - 420	53 - 298	2 - 217	3 - 164	102 - 260	83 - 595	3 - 221	181 - 357
5857	5858	5859	2860	5861	5862	5863	5864	5865	5866	5867	5868	5869		5870	5871	5077	36/2	5873	5874	5875	5876	5877	5878	5879
876650	664270	574681	835534	791508	842078	752829	572404	782877	973716	775299	870414	584717		685648	954599	001073	3/2499	753962	786611	606996	579103	735751	787110	579005
HTGA017	HTGAR40	HTGAR72	HTGAS32	HTGAT93	HTGAV59	HTGAW37	HTGAW75	HTGAX19	HTGA V36	HTGAY79	HTGAZ62	HTGAZ79		HTGBE53	HTGBE76	UTCDE16	11 UBF 10	HTGBF62	HTGBF90	HTGBG55	HTGBH18	HTGBH55	HTGBI93	HTGBJSS

300049, 300055, 300100, 300100, 300104, 300126, 301201, 301590, 302060, 302060, 302960, 303700, 303800, 303900, 304800, 305900, 305900, 305900, 305900, 305900, 306700, 306995, 308840, 308840, 309200, 309548, 309620, 309500, 310300, 310460, 311300, 311510, 314300, 314400														
	S0134: 2	S0134: 1 and H0090: 1.	S0134: 1 and H0423: 1.	S0134: 2	S0134: 2 and S0002: 1.	S0134: 2	S0134: 2	S0134: 1 and S0344: 1.	S0134: 3	S0134: 2	S0134: 2	S0134: 1 and S0218: 1.	S0134: 2	S0134: 1 and H0444: 1.
	Pro-8 to Trp-15.	Ala-29 to Arg-41.		Asn-32 to His-39.			Glu-28 to Ser-33.	Lys-32 to Gln-37.			Gln-54 to Glu-60.	Leu-27 to Ser-33, Gln-46 to Ala-53.		His-1 to Gly-19, Ala-26 to Gly-31, Pro-48 to Ser-57,
	15632	15633	15634	15635	15636	15637	15638	15639	15640	15641	15642	15643	15644	15645
	78 - 341	66 - 281	35 - 238	3 - 215	222 - 145	1 - 270	54 - 239	144 - 311	3 - 272	91 - 234	22 - 228	82 - 288	121 - 327	122 - 559
	5880	5881	5882	5883	5884	5885	5886	5887	5888	5889	5890	5891	5892	5893
	772325	572643	576641	206500	683557	578806	870406	262699	973978	920445	506502	964884	579028	723090
	HTGBK66	HTGBL34	HTGBL72	HTGBN09	HTGBN27	HTGBN57	HTGBP65	HTGBR20	HTGBR93	HTGBS02	HTGBY51	HTGCD10	HTGCD85	HTGCF49

																							:										
								:																									
	S0134: 1 and H0576: 1.	AR089: 2, AR061: 1	2, S0134: 1, H0635: 1,	L0370: 1, S0142: 1, L0792:	1, H0521: 1, H0522: 1,	L0779: 1 and L0366: 1.	S0134: 1, L0471: 1, L0753:	1 and H0543: 1.	S0134: 2 and S0114: 1.	S0134: 1 and H0580: 1.	S0134: 2	AR054: 10, AR050: 7,	AR051: 3	S0134: 2	S0134: 2	S0114: 1 and S0134: 1.	S0134: 2	S0134: 1 and H0421: 1.	S0134: 1, S0218: 1, S0002:	1 and L0748: 1.	S0134: 2 and H0543: 1.	S0134: 1 and H0486: 1.	S0134: 2	S0134: 1 and H0543: 1.	S0134: 1 and S0002: 1.	S0134: 1 and S0002: 1.	S0134: 1 and S0218: 1.	S0134: 2 and S0114: 1.	S0134: 2 and S0114: 1.		S0134: 2	S0134: 1 and H0444: 1.	S0134: 1 and S0218: 1.
Ala-83 to Asn-117.	Asn-1 to Val-6.	Arg-25 to Glu-32,	Asp-138 to Gln-145,	Glu-164 to Asp-174,	Leu-185 to Lys-194.				Thr-1 to Thr-6.							Glu-71 to Val-77.	Ser-13 to Arg-23.	Gln-1 to Trp-25.			Pro-41 to Cys-46.			Asn-15 to Trp-34.		Arg-1 to Phe-7.	Gly-1 to Lys-15.	Asn-20 to Gly-28.	Phe-11 to Glu-25,	Lys-33 to Arg-51.	Gly-2 to Gln-7.		Gly-12 to Val-29.
	15646	15647					15648		15649	15650	15651	15652			15653	15654	15655	15656	15657		15658	15659	15660	15661	15662	15663	15664	15665	15666		15667	15668	15669
	3 - 155	408 - 1103					79 - 243		88 - 276	204 - 338	100 - 219	1 - 183			1 - 132	80 - 358	1 - 138	10 - 144	128 - 391		70 - 279	2 - 205	15 - 167	55 - 204	49 - 213	124 - 279	43 - 165	99 - 266	113 - 298		75 - 230	9-116	240 - 365
	5894	5895					2896		2897	5898	5899	2900			5901	5902	5903	5904	5905		5906	5907	2908	5909	5910	5911	5912	5913	5914		5915	5916	5917
	894005	909849					588166		571389	935789	578774	747573			913673	678122	89282	770143	880293		974433	933260	921650	960912	496297	679403	713353	735002	579127		757191	769010	733405
	HTGCG89	HTGCH58					HTGCI80		HTGCJ54	HTGCL06	HTGCL40	HTGCL94			HTGCM13	HTGCM90	HTGCM92	HTGCP76	HTGCQ15	!	HTGCQ19	HTGCS20	HTGCS81	HTGCT54	HTGCT57	HTGCU25	HTGCU28	HTGDG28	HTGDG63		HTGDG70	HTGDG75	HTGDM56

						-																										
S0114: 2, S0134: 1 and	H0255: 1.		S0134: 1 and S0218: 1.	S0134: 1 and S0218: 1.	AR089: 0, AR061: 0	S0134: 1 and H0069: 1.	H0543: 2 and S0134: 1.	S0134: 1 and H0090: 1.	S0134: 2 and L0599: 1.	S0134: 3, H0556: 1 and S0216: 1.	AR089: 10, AR061: 8	S0134: 1, S0278: 1, S0144:	1, S0344: 1 and H0423: 1.			S0134: 1 and S0426: 1.	L0776: 6, H0591: 2, S0218:	1, L0805: 1, H0521: 1 and	CO210. 1 22 3 110206. 1	S0218: 1 and H0306: 1.	S0114: 1 and S0218: 1.	S0218: 1 and H0306: 1.	S0134: 1 and S0218: 1.	H0556: 1 and S0218: 1.	S0218: 2	S0218: 1 and H0521: 1.	AR089: 0, AR061: 0	S0218: 1, H0264: 1 and	S0053: 1.	S0218: 2	S0114: 1 and S0218: 1.	S0218: 1 and H0436: 1.
Gln-20 to Ala-26,	Thr-58 to Lys-65,	Gly-83 to Glu-89.	Pro-10 to Arg-15.	Ile-20 to Thr-25.	Pro-12 to Asn-20,	Asp-43 to Arg-49.	Gln-25 to Val-30.		Arg-1 to Lys-7.		Arg-157 to Asn-172,	Val-179 to Leu-185,	Arg-206 to Ile-215,	Ser-232 to Thr-241,	Glu-374 to Pro-379.	His-20 to Cys-27, Ala-40 to Ile-54.	Glu-8 to Gln-13,	Glu-43 to Ser-53.	I am 12 to Dec 20	Leu-13 to PT0-29.				Leu-13 to Phe-20, Leu-28 to Glv-46.						Thr-41 to Asp-58.	His-25 to Ala-37.	Pro-9 to Asp-21.
15670			15671	15672	15673		15674	15675	15676	15677	15678					15679	15680		15601	12081	15682	15683	15684	15685	15686	15687	15688			15689	15690	15691
2 - 355			161 - 373	71 - 208	306 - 638		270 - 536	336 - 464	322 - 516	50 - 220	208 - 1356					169 - 462	137 - 397		617 772	017 - 710	1 - 462	3 - 182	35 - 169	337 - 498	1 - 147	3 - 212	323 - 457			166 - 384	45 - 302	268 - 417
5918			5919	5920	5921		5922	5923	5924	5925	5926					5927	5928		5070	3929	5930	5931	5932	5933	5934	5935	5936			5937	5938	5939
967158			958651	992659	974962		712249	509802	661477	710759	967030					883517	725254		922809	07070	729223	711417	754761	771825	769764	769765	685425			728905	684871	674409
HTGDM65			HTGDS63	HTGDS88	HTGDT91		HTGDU57	HTGDV50	HTGDW16	HTGDW40	96MQDLH	-				HTGDX29	HTGEB95		HTGFD32	HIGED32	H1GED54	HTGED59	HTGED69	HTGEF77	HTGEF78	HTGEG76	HTGEL46			HTGEL54	HTGEL55	HTGEO46

														•																		
S0218: 2	S0218: 1 and H0063: 1.	H0264: 2 and S0218: 1.		S0218: 1 and S0428: 1.	AR089: 1, AR061: 1	S0218: 2	S0218: 2	S0218: 2	S0218: 1, H0444: 1 and	H0422: 1.	S0218: 2	S0218: 1 and S0053: 1.	S0218: 2 and H0580: 1.				S0218: 1 and H0521: 1.	S0114: 1 and S0218: 1.	S0218: 1 and H0255: 1.			S0218: 2	S0218: 2 and L0758: 1.	S0218: 4	S0218: 2 and S0114: 1.	H0265: 1 and S0218: 1.		S0218: 2, L0369: 1 and	L0376: 1.	S0218: 2	S0218: 2	S0218: 2
Arg-1 to Ser-11, Asp-21 to Leu-29.		Ser-3 to Ser-10, Pro-37 to Thr-44,	Phe-67 to Gln-74.		Arg-1 to Gly-8,	Pro-26 to Gly-34.	Lys-16 to Asn-23.		Lys-28 to Asn-35.		Val-23 to Pro-31.		Gly-1 to Cys-6,	Leu-18 to Lys-26,	Glu-33 to Arg-43,	Ile-63 to Ile-82.			Gln-8 to Asn-17,	Asp-24 to Gln-30,	Arg-41 to Cys-48, Ala-71 to Phe-77.		Asp-5 to Thr-13.	Leu-1 to Cys-7.	Ser-1 to Cys-8.	His-1 to Lys-6,	Val-45 to Tyr-54.	Val-9 to Val-15,	Trp-44 to Arg-54.	Met-27 to Ser-33.	Tyr-10 to Gly-17.	
15692	15693	15694		15695	15696		15697	15698	15699		15700	15701	15702				15703	15704	15705			15706	15707	15708	15709	15710		15711		15712	15713	15714
57 - 272	422 - 622	13 - 276	,	44 - 352	3 - 311		27 - 161	1 - 69	39 - 218		178 - 330	96 - 215	1 - 270	•			158 - 310	3 - 128	2 - 232			206 - 364	3 - 323	313 - 501	2 - 166	53 - 280		147 - 341		90 - 239	31 - 135	32 - 223
5940	5941	5942		5943	5944		5945	5946	5947		5948	5949	5950				5951	5952	5953	,		5954	5955	5956	5957	5958		5959		2960	5961	5962
703733	723097	799683		789681	967047		703443	711181	741828		753031	683469	719048				778928	935470	668924			757193	669222	974106	866957	767032		952555		722626	738974	742908
HTGEO86	HTGE094	HTGEP20		HTGEP92	HTGEQ11		HTGEQ34	HTGEQ40	HTGEQ61		HTGEQ68	HTGER72	HTGET46				HTGET82	HTGEU06	HTGFC20			HTGFC70	HTGFK43	HTGFN46	HTGF051	HTGF075		HTGFP07		HTGFP49	HTGFP59	HTGFP62

	,																										
S0134: 1 and S0218: 1.	S0218: 1 and H0264: 1.	L0747: 2, S0218: 1 and H0423: 1.	S0218: 1 and H0581: 1.		\$0218: 2	AR089: 1, AR061: 1	S0218: 2	H0265: 1 and S0218: 1.	S0218: 2	S0218: 2	S0218: 2	S0218: 2	S0218: 2	S0218: 2	S0218: 1, S0212: 1, H0318: 1 and L0648: 1	S0218: 2 and H0556: 1.	H0556: 1 and S0218: 1.	H0222: 1 and H0062: 1.	H0063: 2 and L0657: 1.		H0063: 2	H0556: 1 and H0063: 1.	H0063: 1 and H0423: 1.	H0063: 2	H0220: 1, H0486: 1, H0063:	H0063: 2	H0402: 1 and H0063: 1.
Leu-70 to Ser-76.	Gly-20 to Pro-27.		Pro-33 to Ala-46, Asn-54 to Val-69,	Pro-73 to Ser-78,	Asn-34 to Lvs-40.		Ser-60 to Leu-66.					Asp-1 to Ser-7, Lys-23 to Ile-28.	Leu-11 to Gln-16.	Thr-1 to Asn-10.	Arg-20 to Gly-26.	Pro-10 to Ala-16.							Tyr-10 to Thr-16.	Thr-6 to Leu-11.			Glu-6 to Thr-17,
15715	15716	15717	15718		15719	15720	15721	15722	15723	15724	15725	15726	15727	15728	15729	15730	15731	15732	15733	19350	15734	15735	15736	15737	15738	15739	15740
27 - 257	1 - 249	167 - 556	3 - 329		75 - 278	3 - 275	13 - 285	59 - 190	2 - 232	3 - 158	3 - 449	114 - 266	36 - 218	2 - 103	7 - 129	2 - 235	3 - 197	59 - 313	27 - 203	265 - 62	3 - 128	3 - 392	259 - 468	101 - 256	172 - 318	1 - 132	1 - 366
5963	5964	5965	9969	•	5967	8969	5969	5970	5971	5972	5973	5974	5975	5976	2977	5978	5979	2980	5981	9598	5982	5983	5984	5985	2986	5987	2988
810302	690276	744678	2229		779055	923443	707730	735683	958583	966328	974590	698714	714932	774657	880699	869239	927051	503638	924456	954427	502818	915256	578568	502935	964562	526716	921965
HTGFR80	HTGFW29	HTGFW63	HTGFX16		HTGFX82	HTGFZ03	HTGFZ35	HTGFZ58	HTGGL08	HTGGL11	HTGGL23	HTGGL32	HTGGL43	HTGGL79	HTGGM20	HTGGN13	HTGGN92	HTHAA47	HTHBA07		HTHBA18	HTHBA68	HTHBC31	HTHBC37	HTHBG67	HTHBK65	HTHBL65

								2q37.2																		
	S0114: 1 and H0063: 1.	H0063: 1 and H0264: 1.	H0265: 1 and H0063: 1.	H0318: 1 and H0063: 1.	H0063: 2 and S0052: 2.	H0063: 1 and H0264: 1.	H0063: 1, H0272: 1 and L0749: 1.	H0063: 2	H0063: 2	H0063: 2	H0063: 2	H0063: 3	H0063: 1 and H0521: 1.	H0063: 1 and H0543: 1.	H0305: 1, H0589: 1, H0063: 1 and L0591: 1.	H0063: 2	H0063: 1 and H0264: 1.	H0063: 2	H0063: 1 and S0426: 1.	H0063: 2	H0305: 3, H0581: 1 and	H0063: 2	H0063: 2	S0114: 1 and H0063: 1.	L0794: 3, L0766: 2, H0581: 1, H0063: 1, L0792: 1,	LU400. 1, LU407. 1 allu
Trp-23 to Arg-38.	Lys-11 to Glu-19.	Pro-23 to Glu-35.			Ser-25 to Trp-30.	Lys-19 to Leu-24.		His-1 to Ser-7, Thr-33 to Gly-40.	Cys-24 to Asn-33, Ala-53 to Ser-61.	His-8 to Asp-13, Arg-21 to Cys-29.	Asp-1 to Glu-6.		Tyr-29 to Ile-37.	Gly-1 to Lys-12, Arg-19 to Ser-27.						Lys-19 to Asn-27.	Gly-24 to Arg-29.	Asn-28 to Phe-43.	Pro-1 to Ser-9.			
	15741	15742	15743	15744	15745	15746	15747	15748	15749	15750	15751	15752	15753	15754	15755	15756	15757	15758	15759	15760	15761	15762	15763	15764	15765	
	3 - 140	85 - 243	2 - 133	85 - 246	320 - 493	107 - 298	208 - 477	3 - 359	109 - 321	131 - 340	62 - 331	407 - 535	117 - 245	1 - 165	293 - 547	82 - 291	3 - 275	239 - 376	1 - 141	20 - 268	199 - 375	147 - 350	183 - 371	1 - 231	1 - 84	
	5989	5990	5991	5992	5993	5994	5665	9669	5997	5998	5999	0009	6001	6002	6003	6004	6005	9009	2009	8009	6009	6010	6011	6012	6013	
	531115	529671	557957	757741	712474	572407	712649	602099	278858	578877	664274	973272	967275	578843	630239	578875	579080	870355	922873	959719	842036	578831	578826	705888	578757	
	HTHBO09	HTHBQ94	HTHBU75	HTHBW69	HTHBY64	HTHCA17	HTHCA75	HTHCB68	HTHCB83	HTHCC54	HTHCD17	HTHCD91	HTHCG11	HTHCG86	нтнсн22	HTHCJ42	HTHCK38	HTHCK42	HTHCK91	HTHCM08	HTHCM19	HTHCM39	HTHCN38	HTHCO28	HTHC092	

, L0748:	3: 1.			5:1.	5:1.	5:1.									 063: 1q21.2-q22				 063: 1q21.2-q22	 063: 1q21.2-q22					 063: 1q21.2-q22    		
H0063: 1, L0766: 1, L0748: 1 and H0543: 1.	S0116: 2 and H0063: 1.	H0063: 2	H0063: 2	H0063: 2 H0063: 1 and H0445: 1.	H0063: 2 H0063: 1 and H0445: 1. H0063: 2	H0063: 2 H0063: 1 and H0445: 1. H0063: 2 H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q21.2-q22 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2  and L0749: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2  and L0749: 1.  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2  1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.  H0063: 2  H0063: 2  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0063: 2  H0063: 2  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 2  H0063: 1	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  AR089: 17, AR061: 10  H0318: 1 and H0063: 1.  H0580: 1 and H0063: 1.  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  H0063: 2	H0063: 2  H0063: 1 and H0445: 1.  H0063: 2  S0134: 1, L0717: 1, H0063: 1q2 1 and L0749: 1.  H0063: 2  H0063: 1  H0063: 1  H0063: 2  H0063: 1  H0063: 2  H0063: 2  H0063: 1
	His-1 to Pro-14,	Arg-19 to Val-25	Cys-29 to His-42, Pro-62 to Arg-68, Cys-83 to Glu-92.	Cys-29 to His-42, Pro-62 to Arg-68, Cys-83 to Glu-92 Glu-1 to Ala-11.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11.	Cys-29 to His-42, Pro-62 to Arg-68, Cys-83 to Glu-92, Glu-1 to Ala-11. Lys-35 to Gly-42.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to I ye-55.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Ile-16 to His-22. Leu-1 to Lys-8.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Leu-71 to Gly-78. Teu-1 to Lys-8. Thr-20 to Asn-26.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Ile-16 to His-22. Leu-1 to Lys-8. Thr-20 to Asn-26.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Ile-16 to His-22. Leu-1 to Lys-8, Thr-20 to Asn-26. Pro-22 to Pro-32,	Cys-29 to His-42, Pro-62 to Arg-68, Cys-83 to Glu-92 Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Thr-20 to Asn-26. Pro-22 to Pro-32, Arg-40 to Lys-50, Ala-69 to Gly-74.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Thr-20 to Asn-26. Pro-22 to Pro-32, Arg-40 to Lys-50, Ala-69 to Gly-74. Arg-1 to Thr-7,	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Thr-20 to Asn-26. Pro-22 to Pro-32, Arg-40 to Lys-50, Ala-69 to Gly-74. Arg-1 to Thr-7, Phe-27 to Ala-47.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Leu-71 to Gly-78. Thr-20 to Asn-26. Pro-22 to Pro-32, Arg-40 to Lys-59, Ala-69 to Gly-74. Arg-1 to Thr-7, Phe-27 to Ala-47. Arg-18 to Val-37.	Cys-29 to His-42. Pro-62 to Arg-68. Cys-83 to Glu-92. Glu-1 to Ala-11. Lys-35 to Gly-42. Asn-45 to Ser-50. Gly-48 to Lys-55. Leu-71 to Gly-78. Thr-20 to Asn-26. Pro-22 to Pro-32, Arg-40 to Lys-50, Ala-69 to Gly-74. Arg-1 to Thr-7, Phe-27 to Ala-47. Arg-18 to Val-37. Pro-52 to Leu-58.
15767	1	7	0 4 0	D   P   C   C   C   C   C   C   C   C   C																							
195 - 166	3 - 296	<u> </u>		44 - 286	44 - 286	44 - 286 199 - 297 159 - 314	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252	2-205 45-286 199-297 159-314 2-211 2-205 45-374 55-147 3-152 73-252	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252 29 - 280	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252 29 - 280 222 - 515	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252 73 - 280 29 - 280 20 - 28	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 280 29 - 280 20 - 28	44 - 286 199 - 297 159 - 314 2 - 211 2 - 205 45 - 374 55 - 147 3 - 152 73 - 252 73 - 252 94 - 306 2 - 367	2-205 45-374 55-147 3-152 73-280 29-280 29-280 29-280 29-280 29-280 29-280 29-280 29-280 29-367
6015	6016			6017																							
. 00000	959994 578722			856477	856477 578849	856477 578849 578851	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	856477 578849 578851 671098	\$54477 \$78849 \$78851 \$671098 419714	856477 578849 578851 671098 419714 937393	856477 578849 578851 671098 419714 937393	856477 578849 578851 671098 419714 937393 578823	856477 578849 578851 671098 419714 937393 707732 578823	856477 578849 578851 671098 419714 937393 707732 578823	856477 578849 578851 671098 419714 937393 707732 578823 578823	856477 578849 578851 671098 419714 937393 707732 578823 578823 578874	856477 578849 578851 671098 419714 937393 707732 578823 578828 578874	856477 578849 578851 671098 419714 937393 707732 578823 578824 971165	856477 578849 578851 671098 419714 937393 707732 578823 578874 971165	856477 578849 578851 671098 671098 419714 937393 707732 578823 578823 578874 971165	856477 578849 578851 671098 671098 707732 578823 578823 578874 971165 707065 869483
es Correcti	HTHCQ63			HTHCT64	HTHCT64 HTHCU43	HTHCT64 HTHCU43 HTHCU85	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCV85 HTHCV21	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCU85 HTHCV21	HTHCT64 HTHCU43 HTHCV21 HTHCV21	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22	HTHCT64 HTHCU43 HTHCV21 HTHCV21 HTHCV22	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCV35	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCV35 HTHCW35	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCV35 HTHCW35 HTHCW35	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCV35 HTHCW35 HTHCW35 HTHCW35	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCV35 HTHCW45 HTHCW45 HTHCW45	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCW35 HTHCW35 HTHCW35 HTHCW45 HTHCW83	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV35 HTHCW35 HTHCW45 HTHCW45 HTHCW83	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV35 HTHCW35 HTHCW45 HTHCW45 HTHCW83 HTHCW83 HTHCW83	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV59 HTHCW45 HTHCW45 HTHCW45 HTHCW83 HTHCX84 HTHCX84	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV59 HTHCW45 HTHCW45 HTHCW83 HTHCW83 HTHCW83 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84	HTHCT64 HTHCU43 HTHCV21 HTHCV22 HTHCV22 HTHCW35 HTHCW45 HTHCW35 HTHCW45 HTHCW45 HTHCW45 HTHCW64 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84 HTHCX84

			···																								
H0445: 1.	H0063: 1 and S0428: 1.	H0063: 1 and H0423: 1.	H0637: 1, H0063: 1, L0598: 1, H0542: 1 and H0423: 1.	H0250: 1, H0271: 1 and H0063: 1.	H0063: 5		H0063: 2	H0063: 2	H0063: 2 and L0519: 1.	H0063: 2	H0063: 2	H0063: 2	H0063: 1 and H0272: 1.	0 07 0044	H0063: 2		H0063: 2			H0580: 1 and H0063: 1.	AR089: 14, AR061: 3	H0063: 2, H0487: 1 and	H0445: 1.			L0539: 1, H0580: 1 and H0487: 1.	H0487: 1 and S0002: 1.
			Asn-10 to Leu-15, Phe-35 to Leu-42, Ser-56 to Arg-62.	Val-4 to His-15.	Lys-1 to Thr-9,	Lcu-1/ 10 A18-20.		Ser-40 to Asp-46, Val-48 to Lys-63.			Asn-3 to Gly-11.		Lys-37 to Gly-43, Phe-57 to Thr-65.		Arg-1 to Gly-16, Ala-28 to Ala-34,	Ser-40 to Lys-53.	Ala-1 to Lys-13,	Leu-19 to Ile-24,	Tyr-26 to Ile-31, Pro-40 to Lys-46.	Leu-19 to Arg-31.							Thr-59 to His-67.
	15783	15784	15785	15786	15787	19351	15788	15789	15790	15791	15792	15793	15794	1000	15795		15796			15797	15798		,	19352	19353	15799	15800
	286 - 363	164 - 307	1 - 186	84 - 242	78 - 1	332 - 457	173 - 304	1 - 243	145 - 333	145 - 252	213 - 383	134 - 268	33 - 227	000	2 - 220		2 - 208			400 - 558	519-313			358 - 185	239 - 457	111 - 260	112 - 348
	6031	6032	6033	6034	6035	9599	6036	6037	6038	6039	6040	6041	6042	27.07	6043		6044			6045	6046			9600	9601	6047	6048
	791641	967215	870339	574675	490926	973304	959718	870335	578878	579199	578834	578882	858996	70000	5/96/6		578848			764136	491273	-		853995	880424	705432	681865
	HTHDE44	HTHDE91	HTHDF38	HTHDH24	HTHDH34		HTHDI31	HTHDI43	HTHDM25	HTHDM65	HTHDM69	HTHDP70	нтнро85	OCCUTATION.	HTHDK09		HTHDR24			HTHDU80	HTJAB35					HTJAB39	HTJAD26

H0487: 1 and H0423: 1.	H0583: 1, H0487: 1, L0805: 1 and L0740: 1.	H0265: 1, H0402: 1, H0488: 1 and H0522: 1.		H0488: 2	H0488: 3	H0591: 2 and H0488: 1.	H0488; 2	H0488: 2	H0488: 2 and L0749: 1.	H0488: 2	H0488: 1, L0762: 1, H0543:	1 and H0422: 1.	H0050: 1 and H0488: 1	110009. 1 and 110466. 1.	H0488: 2 and L0605: 1.				H0271: 1 and H0488: 1.	S0212: 1 and H0488: 1.	H0488: 2	H0488: 2	S0212: 1 and H0488: 1. 8	H0488: 2	H0488: 2	H0488: 1 and S0002: 1.		H0271: 2, H0488: 1, L0438: 1 and L0439: 1.	T0002: 1, H0488: 1 and
					Glu-1 to Tyr-7.		Gly-1 to Gly-9, Pro-16 to Leu-25.				Glu-17 to Ser-26,	Lys-61 to Lys-70,	Flic-60 to Cys-93.	Olu-23 to 1 yt-20.	Thr-17 to Ser-24,	Glu-28 to Lys-38,	Ser-43 to Val-49,	Ser-56 to Lys-64.		Tyr-54 to Gln-59.						Thr-1 to His-6,	Phe-8 to Pro-24, Leu-69 to Ser-75.	Arg-19 to Gly-28.	Pro-24 to Ala-29.
15801	15802	15803	19354	15804	15805	15806	15807	15808	15809	15810	15811		15017	21001	15813				15814	15815	15816	15817	15818	15819	15820	15821		15822	15823
113 - 292	245 - 379	448 - 200	448 - 200	222 - 368	115 - 393	104 - 310	1 - 120	2 - 241	253 - 447	2 - 211	2 - 283		1 200	1 - 300	29 - 220				276 - 461	67 - 255	7 - 102	1 - 138	61 - 222	78 - 332	196 - 417	2 - 373		172 - 441	7 - 306
6049	0509	6051	9602	6052	6053	6054	6055	6056	6057	8509	6029		6060	0000	6061				6062	6063	6064	6065	9909	2909	8909	6909		0209	6071
703321	668339	760226	760247	924240	774407	754605	729039	948518	766883	870316	771677		070215	0/02/0	175766				713132	759910	787655	766881	713142	793328	870311	924726		924939	795110
HTJAE28	HTJAE42	HTJMB71		HTJMD95	HTJMH80	НТЛМО69	HTJMR65	HTJMT23	HTJMT75	HTJMU34	HTJMU77		UTIMITE?	TILL SINION	HTJMV80				HTJMW42	HTJMX71	HTJMZ90	HTJNB83	HTJNC42	HTJNC53	HTJND12	HTJNI42		HTJNK36	HTJNM52

										,							**															
										:																						
L0602: 1.	H0318: 1 and H0488: 1.	H0265: 1 and H0488: 1.	H0063: 1 and H0488: 1.	H0581: 1 and H0488: 1.	H0264: 2	AR051: 50, AR050: 37,	AR054: 35	H0179: 2, L0519: 2, H0265:	1, H0264: 1, L0541: 1,	S0053: 1 and S0216: 1.	H0264: 3	H0264: 2		H0264: 2	AR089: 1, AR061: 1	L0766: 2, H0264: 1 and	H0521: 1.	H0264: 2	H0264: 2	H0264: 2	H0264: 2	H0416: 1 and H0264: 1.	H0264: 1, S0002: 1 and	H0521: 1.	H0264: 2	H0264: 2	H0264: 2 and L0439: 1.	H0581: 1, H0272: 1 and	S0428: 1.		H0272: 1 and H0445: 1.	H0264: 1 and H0272: 1.
	Arg-14 to His-23.		Ser-8 to Lys-15, Pro-30 to Asp-36.			Tyr-51 to Glu-57,	Ser-164 to Pro-171,	Pro-185 to Lys-198.				Gln-3 to Asn-8,	Glu-22 to Arg-27.		Ser-67 to Trp-77.	•		Tyr-31 to Arg-40.		Asn-6 to Phe-16.					Leu-14 to Glu-24.			Gly-1 to Tyr-9,	His-37 to Pro-42,	Lys-125 to Pro-131.	His-40 to Arg-52.	Ser-6 to His-12, Lys-31 to Ser-36.
	15824	15825	15826	15827	15828	15829					15830	15831		15832	15833			15834	15835	15836	15837	15838	15839		15840	15841	15842	15843			15844	15845
	2 - 205	3 - 161	2 - 535	2 - 244	2 - 265	2-610					53 - 121	2 - 97		47 - 235	911 - 816			1 - 204	81 - 164	23 - 214	3 - 284	3 - 398	10 - 195		85 - 180	2 - 61	177 - 392	3 - 395			1 - 168	12 - 176
	6072	6073	6074	6075	9/09	<i>LL</i> 09					8209	6209		6080	6081			6082	6083	6084	6085	6086	2809		8809	6080	0609	6091			6092	6093
	771941	781702	870336	931039	870027	866201					989662	529555		751902	008996			921745	954183	530192	530186	738214	620370		530114	530116	507322	960618			839919	715538
	HTJNQ25	HTJNR19	HTJNS23	HTJNV55	HTOAA48	HTOAF15					HTOAI35	HTOAI69		HTOA193	HTOAK34			HTOAK36	HTOA019	HTOA075	HTOAT80	HTOAU62	HTOAU94		HTOAW19	HTOAW26	HTOAW37	HTOBA06			HTOBA10	HTOBE15

H0272: 2	H0272: 2	H0272: 2	H0272: 1, S0002: 1 and L0748: 1.	H0272: 1 and H0488: 1.	H0063: 1 and H0272: 1.		H0272: 2 and L0748: 1.	H0272: 2 and L0791: 1.	H0264: 2	L0766: 6, L0754: 4, L0779:	4, H0264: 2, L0747: 2 and	<u>L0777: 1.</u>	H0264: 3	H0264: 2		H0264: 2	H0264: 2	AR089: 22, AR061: 6	H0264: 2 and L0766: 1.	H0264: 3 and L0361: 1.	H0264: 2 and H0521: 1.	H0264: 2		H0264: 2	H0264.3	H0264: 2	S0114: 1 and H0264: 1	H0264: 2	H0264: 4 and H0179: 1.	H0264: 3.	H0264: 2
	Pro-14 to Gly-35.	Lys-10 to Gly-16.	Arg-16 to Thr-22.	Ser-3 to Pro-9.			Arg-33 to Lys-38, Pro-60 to Lys-67.	Ser-29 to Gln-34.						Asn-1 to Glu-7,	Val-40 to Glu-47.	Gly-1 to Ser-7.	Glu-1 to Glu-10.	Arg-80 to Lys-88,	Ser-94 to Arg-103.	Pro-14 to Ala-19.	His-2 to Pro-12.	Ile-11 to Tyr-18,	Met-29 to GIII-33.	Thr-23 to Asn-34,	Arg. 27 to Vol 32	Pro-31 to Lvs-36	Ser-27 to His-34.	Val-3 to Gln-8.	Phe-38 to Leu-44.	Ser-1 to Asn-12.	
15846	15847	15848	15849	15850	15851	19355	15852	15853	15854	15855			15856	15857		15858	15859	15860		15861	15862	15863		15864	15865	15866	15867	15868	15869	15870	15871
57 - 146	10 - 141	6 - 314	2 - 250	27 - 146	32 - 169	356 - 192	199 - 411	2 - 187	2 - 142	1 - 549			3 - 209	20 - 160		90 - 215	38 - 157	1 - 492		48 - 221	3 - 194	3 - 122		19 - 216	1 135	107 - 286	70 - 234	47 - 178	171 - 302	3 - 215	38 - 163
6094	9609	9609	2609	8609	6609	9603	6100	6101	6102	6103			6104	6105		6106	6107	6108		6109	6110	6111		6112	6113	6114	6115	6116	6117	6118	6119
925407	954184	530325	682263	740977	966734	921996	230009	523838	530149	921426			927826	530397		880911	968505	909952		799691	852560	866698		558007	676384	925386	708892	507295	799701	811293	296698
HTOBF03	HTOBF07	HTOBF35	HTOBG27	HTOBG70	HT0B011		HTOCF92	HTOCK26	HTODB23	HTODC33			HTODE04	HTODE78		HTODG07	HTODG10	HTODG16		HTODG47	HTODG55	HTODG58		HTODG60	HTODG83	HTODH04	HTODH37	HTODL81	HTODL85	HTODM58	HTODN21

	400003, 415000															,													
	Yq11																***************************************												
H0581: 1, H0264: 1 and H0521: 1.	H0179: 1 and H0264: 1.	H0264: 3	H0264: 2	H0264: 2	H0264: 2	H0264: 2	H0069: 1 and H0264: 1.	S0142: 2 and H0264: 1.	H0264: 2	H0264: 2	S0114: 1 and H0264: 1.	H0264: 2	H0264: 2	H0264: 2	H0087: 1 and H0264: 1.		<del></del>		H0264: 2	H0264: 2	H0264: 2	H0264: 2	S0114: 1 and H0264: 1.	H0264: 2	H0083: 1 and H0264: 1.	H0264: 2		H0318: 1 and H0264: 1.	AR061: 6, AR089: 2 H0264: 2
	Asp-35 to Ser-40.	Lys-8 to Phe-14.	Ala-37 to Met-44.	Thr-9 to Asn-14.	Arg-1 to Thr-18.	Ser-25 to Arg-30.	Gln-19 to Leu-24, Ser-28 to Gly-35.				Val-21 to Lys-33.						Ala-1 to Lvs-9.	Lys-22 to Lys-28, Lys-37 to Asp-43.				Ile-20 to Asp-32.			Pro-5 to Leu-16.	Tyr-3 to Leu-11,	Arg-14 to Glu-19.	Thr-12 to Asn-21, Pro-39 to Gln-45.	Thr-11 to Gly-24, Pro-27 to Asn-37,
15872	15873	15874	15875	15876	15877	15878	15879	15880	15881	15882	15883	15884	15885	15886	15887	19356	19357		15888	15889	15890	15891	15892	15893	15894	15895		15896	15897
183 - 326	4 - 147	86 - 211	166 - 357	40 - 96	48 - 167	213 - 302	61 - 318	214 - 339	3 - 149	2 - 109	31 - 141	286 - 414	77 - 220	136 - 255	1 - 129	158 - 289	458 - 129		110 - 256	3 - 164	65 - 355	2 - 133	2 - 76	101 - 304	3 - 98	34 - 111	- 1	125 - 316	1870 - 2187
6120	6121	6122	6123	6124	6125	6126	6127	6128	6129	6130	6131	6132	6133	6134	6135	9604	9605		6136	6137	6138	6139	6140	6141	6142	6143		6144	6145
684343	527862	960551	967754	523546	529834	529839	839798	742158	967562	968492	774641	529822	529820	659494	845519	286698	927327		723256	742153	811291	968469	529674	529673	932662	529617	i di	08807/	939903
HTODN27	HTODN68	HTOEA06	HTOEA12	HTOEA25	- HTOEC81	HTOEC94	HTOED10	HTOED61	HTOEG69	HTOET10	HTOEV37	HTOEV40	HTOEV50	HTOEY72	HTOFA04			_	HTOFB55	HTOFB73	HTOFC70	HTOFD10	HTOFD31	HTOFD57	HTOF005	HTOF041	OF OHOUSE	H10FQ48	HTOFT22

																									.==						
		AR089: 8, AR061: 5 H0264: 2 and L0367: 1.	H0264: 2	H0264: 2	L0750: 3, L0551: 2, L0748:	2, H0486: 1, L0455: 1,	H0264: 1, S0002: 1, L0764:	1, L0791: 1 and L0740: 1.	H0264: 1 and H0272: 1.	H0264: 2	H0264: 2	H0264: 2	H0318: 1 and H0264: 1.		H0264: 2	H0264: 1 and H0445: 1.			H0264: 2 and L0766: 1.	H0264: 2		H0264: 2	H0264: 2	L0749: 2, H0264: 1 and	S0002: 1.			H0650: 1 and H0264: 1.	H0581: 1 and H0264: 1.	H0341: 1 and H0264: 1.	H0318: 4, L0748: 2, H0264: 1 and H0543: 1.
Gln-44 to Glu-49, Arg-69 to Arg-84.					Ala-11 to Thr-17.				Glu-23 to Lys-29.		Lys-18 to Glu-24.		Thr-1 to Gly-13;	Pro-26 to Leu-31.		His-7 to Trp-12,	Arg-15 to Trp-20,	Tyr-22 to Trp-29.		Pro-19 to Gly-24,	Ser-41 to Ser-46.	His-1 to Cys-10.						Phe-14 to Thr-24.			Pro-18 to Pro-27.
	19358	15898	15899	15900	15901				15902	15903	15904	15905	15906		15907	15908			15909	15910		15911	15912	15913		19359	19360	15914 -	15915	15916	15917
	750 - 905	106 - 270	1 - 249	37 - 156	185 - 337				6 - 122	157 - 390	40 - 132	22 - 102	191 - 334		141 - 335	2 - 172			222 - 434	101 - 307		3 - 332	139 - 231	339 - 572		292 - 624	236 - 364	13 - 105	2 - 193	361 - 158	559 - 768
	9096	6146	6147	6148	6149				6150	6151	6152	6153	6154		6155	6156			6157	6158		6159	6160	6161		9607	8096	6162	6163	6164	6165
	963302	527144	960554	529959	751989				530331	781591	529810	927835	960094		529806	650846			529805	869973		507294	529824	618316	70000	8699/1	869972	961776	924986	714073	889996
		HTOFT34	HTOGA06	HTOGA25	HT0GA35				HTOGA51	HTOGB55	HTOGB92	HTOGC16	HTOGC20		HTOGD28	HTOGD43			HTOGD50	HTOGI75		HTOGI86	HTOGR50	HTOGR65	•			HTOGU30	HTOHB03	HTOHB42	НТОНВ66

															109270, 109270,	109270, 109270,	109270, 113705,	113705, 144200,	148065, 148066,	148066, 148067,	148067, 148069,	148080, 154275,	168610, 171190,	176705, 185800,	200350, 221820,	232200, 249000,	252920, 253250,	600119, 600119,	601363, 601844					
H0264: 2			H0264: 2	H0264: 2	S0114: 1 and H0264: 1.	H0264: 2	H0318: 1 and H0264: 1.	H0264: 2	AR061: 1, AR089: 0	H0264: 2	H0264: 2	H0264: 2	H0264: 2		H0264: 2, H0457: 1, H0271:17q21	1 and H0543: 1.														H0416: 1 and H0264: 1.		H0264: 2	H0264: 2 and S0116: 1.	H0264: 2
Ser-1 to Pro-7,	Ala-14 to Thr-25,	Pro-38 to Pro-44, Val-62 to Gly-73.	Cys-50 to Gly-56.						Arg-8 to Val-18,	Arg-30 to Cys-36.	Pro-6 to Pro-14.	Lys-26 to Arg-33.	Ser-11 to Leu-16,	Leu-20 to Arg-25.	Pro-11 to Ala-17.				-											Pro-20 to His-39,	Pro-47 to Ser-52.	Asp-7 to Lys-16.		Pro-9 to Glu-14.
15918			15919	15920	15921	15922	15923	15924	15925		15926	15927	15928	0000	13929															15930		15931	15932	15933
18 - 239			69 - 266	3 - 128	1 - 129	133 - 252	110 - 193	113 - 241	1 - 201		78 - 266	3 - 122	28 - 147		4 - 41/															46 - 201		3-311	1 - 168	2 - 151
6166			6167	6168	6919	6170	6171	6172	6173		6174	6175	6176	11.	//10												•			6178		6179	6180	6181
577745			537370	929662	531172	537366	740611	908398	537364		537363	971728	537362	0,000	000000			•										_		678071		507136	920734	527865
HTOHC78			HTOHC84	HTOHD27	HTOHF53	HTOHG55	HTOHJ60	HTOHL22	HTOHL35		HTOHM54	HTOHN24	HTOHN42	TITOTIL	HIOHEIS															HTOHS32		HTOHS68	HTOHU09	HTOHV29

	Т	T	Т	T			T	T	T	T	<del></del>	Т	T-	T	$\overline{}$		_	Ţ		T	$\overline{}$		$\overline{}$		1		1	1	_
																										-			
: 2	1: 2	H0457: 1 and H0264: 1.	: 2	:: 2			S0114: 1, H0318: 1 and 10264: 1.	L0766: 2, H0306: 1 and	1.	:: 2	::2	: 2	: 2	: 2	: 2		: 2	H0264: 1, H0543: 1 and		H0271: 1 and H0264: 1.	. 2	H0264: 1 and H0543: 1.	H0556: 1, H0264: 1 and	1	H0264: 1, H0625: 1, L0666:	)740: 1.	H0556: 2, H0265: 1 and	1.	2
1, H0264: 2 41.	. H0264: 2		. H0264: 2		57,	71.								H0264: 2	H0264: 2		H0264: 2					H0264				5.	<u> </u>		50, H0264: 2
4 Lys-1 to Ala-11, Pro-26 to Lys-41	5   Asn-1 to Tyr-6.		7   Leu-1 to Arg-8.		A 500 40 40 A 10 4	Asp-46 to Ata-5/,   Pro-66 to Arg-71.		Pro-10 to Gln-17	Glv-1 to Leu-6.	1	3 Leu-38 to Ser-43	П		25		Asp-15 to Trp-20.		) Gly-24 to Ser-29.	Ala-23 to Glu-28.		Ser-1 to Ser-11.			Ser-25 to Ser-32		Arg-40 to Ala-45		丁	Gln-25 to Arg-30
1 - 246   15934	274 - 405 15935	1 - 360 15936	2 - 139   15937	114 - 356   15938		<u>,</u>	34 - 210 15939	238 - 483 15940	1 - 276 15941		92 - 244 15943		207 - 470 15945	122 - 289 15946	110 - 274 15947		29 - 80 15948	282 - 413 15949	188 - 292 19361	-	1 - 243   15951	113 - 271 15952	40 - 258   15953		107 - 241 15954		213 - 353   15955	020	00-00
6182	6183		6185	6186			6187	6188	6189	6190	6191		6193	6194	6195		6196	6197	6096	<u> </u>	6199	6200	6201	_	6202		6203	7007	0204
HTOHX74 507139			HTOIA68 584946				HTOIK06 954518	HTOIK08 959996	HTOIN17 537322		HTOIO36 537320		-		HTOIQ05 932440	$\neg$		HTOIS27 485268	934366	HTOIT32 418666	HTOIW02 920752		HTOIY09 836003	1	HTOIZ34 707039		HTOJA65   456824	†	HIOJA83 3/4/04

5029	-	15957	Tyr-42 to Trp-50.	H0264· 2		
176 - 316	+	15958	Gly-10 to Gly-15.	H0264: 2		
245 - 466		15959	Ser-8 to Met-15, Gly-24 to Pro-29, Lys-63 to Ser-74.	H0445: 2 and H0264: 1.		
89 - 262		15960		S0114: 1 and H0264: 1.		
2 - 166		19651		H0264: 2		
2 - 391		15962	Arg-43 to Trp-48.	H0341: 1, H0264: 1 and H0543: 1.		
18 - 155		15963		H0264: 2, L0748: 1 and L0749: 1.		
29 - 217		15964		H0264: 2		
3 - 245		15965		S0114: 1 and H0264: 1.		
7 - 201		15966	Gly-32 to Ile-37.	H0264: 1 and H0445: 1.		
8 - 139		15967		S0114: 1 and H0264: 1.		
23 - 133		15968		H0264: 2		
396 - 644		15969	Ser-35 to Ala-48, Ser-73 to Gly-82.	H0264: 1, S0428: 1 and S0053: 1.		
1 - 159		15970		H0264: 3		
1 - 195		15971		H0556: 1 and H0264: 1.		
148 - 369		15972	Leu-1 to Thr-6.	H0341: 2, H0264: 2, L0471:		
2 - 181	1	15973		H0402: 1 and H0087: 1.		
86 - 271		15974	Trp-10 to Lys-19, Gln-21 to Thr-48.	H0318: 1, H0087: 1 and L0747: 1.		
105 - 266		15975	Pro-29 to Asn-34, Glu-43 to Lys-49.	H0402: 3 and H0087: 1.		
89 - 277		15976		H0087: 4 and L0752: 1.	20p11.2	121700, 122000, 188040
151 - 309		15977		H0087: 2		
295 - 609		15978	Ser-35 to Trp-44.	H0087: 1 and S0052: 1.		
282 - 97		15979	Ala-47 to Phe-52.	H0087: 1 and H0116: 1.		
182 - 499	_	15980		H0063: 1 and H0087: 1.		
99 - 326		15981	Glu-1 to Pro-16.	H0486: 1 and H0087: 1.		

AR051: 26, AR054: 20, AR050: 18, AR089: 6, AR061: 2 H0087: 1 and H0264: 1.	H0185: 1 and S0052: 1.	H0185: 2 and L0764: 1.	H0187: 1 and H0576: 1.	S0114: 1 and H0187: 1.	H0187: 1 and H0576: 1.	H0341: 1 and H0187: 1.	S0002: 1 and H0436: 1.	H0436: 1, L0731: 1 and H0445: 1.	S0114: 1 and H0436: 1.	H0341: 1 and H0436: 1.	H0436: 2	H0436: 1, L0748: 1 and	H0436: 2	L0596: 2, H0436: 1, H0445: 1 and H0543: 1.	H0436: 2	H0402: 1 and H0436: 1.	S0114: 1 and H0436: 1.	H0436: 2 and L0439: 2.	H0581: 1 and H0436: 1.	H0436: 2	S0002: 1 and H0436: 1.
Asn-6 to Ser-15, Pro-29 to Arg-42, Pro-91 to Gln-108, Lys-123 to Arg-133, Ile-157 to Phe-168, Gln-171 to Val-178, Gly-185 to Pro-197.		Val-1 to Thr-11.	Ile-1 to Ile-6.		Lys-16 to Lys-21.		Pro-1 to Gly-10, Pro-17 to Phe-24, Thr-33 to Val-45.			Gln-59 to Leu-65.		Cys-7 to Ser-13.	Ser-6 to Asp-12.	Asp-1 to His-6.	Thr-6 to Gln-12, Glu-16 to Cys-25, Pro-28 to Leu-34.	His-21 to Glu-27, Gly-49 to Lys-59.				Arg-12 to Ser-33.	
15982	15983	15984	15985	15986	15987	15988	15989	15990	15991	15992	15993	15994	15995	15996	15997	15998	15999	16000	16001	16002	16003
2 - 604	190 - 330	19 - 96	2 - 151	139 - 243	60 - 167	2 - 232	3 - 173	531 - 719	62 - 187	114 - 605	2 - 217	42 - 329	32 - 211	3 - 314	115 - 228	2 - 178	1 - 81	385 - 525	3 - 317	1 - 102	131 - 436
6230	6231	6232	6233	6234	6235	6236	6237	6238	6239	6240	6241	6242	6243	6244	6245	6246	6247	6248	6749	6250	6251
972248	522671	522076	522058	880725	614968	753217	716756	781306	579041	576623	854019	711271	708331	842014	935647	784364	577510	732182	787303	878678	582498
HTSHM38	HTUAA40	HTUAA86	HTWAB64	HTWAH16	HTWAH51	HTWAM50	HTWBD74	HTWBE77	HTWBF61	HTWBF65	HTWBF82	HTWBG40	HTWBH73	HTWBJ15	HTWBJ71	HTWBL88	HTWBN85	HTWBO55	HTWBR04	HTWBZ01	HTWCA19

								136550, 203310, 269920, 602772																					
								6q14																					
S0218: 1 and H0436: 1.	H0318: 1 and H0436: 1.	H0436: 2	H0436; 2	H0306: 1 and H0436: 1.	H0436: 4	H0436; 2		S0278: 1 and H0436: 1.	AR089: 1, AR061: 0 H0650: 1 and H0436: 1.	S0053: 1 and H0436: 1.	H0436; 2	S0114: 1 and H0436: 1.	H0521: 1 and H0436: 1.	H0305: 2, L0766: 2, H0436:	2, L0777: 2 and L0748: 1.	S0142: 1 and H0436: 1.	H0265: 1 and H0436: 1.	H0305: 5 and H0436: 1.	H0436; 2	H0436: 2	H0436: 2	H0402: 2 and H0436: 1.	H0436: 2, L0021: 1 and	L0766: 1.	H0436: 2	H0436: 2	H0436: 2		H0179: 1 and H0436: 1.
Phe-40 to Phe-45.	His-4 to Glu-27.		Gly-3 to Phe-11, Pro-13 to Lys-38.	Gln-17 to Ala-22.	Pro-18 to Lys-25.	Ser-1 to Pro-7,	Pro-45 to Gly-54, His-58 to Ser-67.	Lys-17 to Thr-26.	Lys-31 to Lys-47.	Ala-9 to Ala-17.			Ala-3 to Lys-13.	Ser-2 to Ser-7.		Asn-1 to Gln-12.	Ser-15 to Lys-20.									Glu-26 to Lys-34.	Tyr-40 to Asp-45,	Asn-52 to Ser-57.	Phe-10 to Tyr-22, Arg-45 to Gly-57,
16004	16005	16006	16007	16008	16009	16010		16011	16012	16013	16014	16015	16016	16017		16018	16019	16020	16021	16022	16023	16024	16025		16026	16027	16028		16029
3 - 149	1 - 186	166 - 348	150 - 272	195 - 371	1 - 219	132 - 347		1 - 165	115 - 312	3-92	1 - 162	204 - 425	2 - 79	156 - 380		352 - 525	230 - 475	2 - 280	138 - 338	94 - 204	1 - 150	86 - 232	2-97		1 - 150	100 - 369	197 - 376	- 1	3 - 233
6252	6253	6254	6255	6256	6257	6258		6229	6260	6261	6262	6263	6264	6265		9979	6267	6268	6569	6270	6271	6272	6273		6274	6275	6276		6277
770109	658018	670812	575962	935641	924008	747197		548176	869547	575950	713022	953482	740327	971129		662321	577494	573580	575959	967190	713870	575975	669745		920337	869553	835624		921697
HTWCA76	HTWCD27	HTWCD40	HTWCE72	HTWCF06	HTWCF25	HTWCF94		HTWCG45	HTWCG65	HTWCG69	HTWCI42	HTWCK07	HTWCL29	HTWCM36		HTWCM56	HTWCN33	HTWCN83	HTWCR25	HTWCS11	HTWCT42	HTWCT61	HTWCX32		HTWCY05	HTWCY69	HTWDB72		HTWDF82

095699	8229	000			•		
	0	3 - 338	16030	Ala-7 to Ser-12,	H0521: 2, S0114: 1, L0654:		
				Tyr-42 to Lys-50, Asn-62 to Ile-67,	1, H0522: 1 and H0436: 1.		
				Thr-100 to Val-105.			
767368	6279	138 - 302	16031		H0556: 1 and H0436: 1.		
715352	6280	147 - 314	16032	Pro-43 to Ser-51.	S0474: 2, H0436: 1, L0749: 1 and H0542: 1		
916680	6281	75 - 221	16033	Glu-37 to Ala-42.	H0436: 2		
664115	6282	1 - 345	16034	Asn-50 to Gly-55, Gln-69 to I en-74	H0436: 1 and H0543: 1.		
575939	6283	1 - 105	16035		H0436: 2		
697825	6284	3 - 374	16036	Glu-15 to Tyr-24, Lys-29 to Lys-34.	L0803: 1, H0521: 1 and H0436: 1		
				Leu-38 to His-43, Arg-47 to Glu-57.			
				Ser-65 to Gln-78,			
		<del></del>		Arg-86 to Ala-91,			
				Leu-95 to Gln-100, Gln-107 to Glu-115.			
965453	6285	3 - 368	16037	Glu-24 to Thr-30, Ser-39 to Pro 44	H0436: 2		
735003	6286	2 - 136	16038	Gln-1 to Glu-21.	S0114: 1 and H0436: 1		
663714	6287	257 - 370	16039		S0218: 1, H0370: 1 and H0436: 1.		
865989	6288	269 - 400	16040	Arg-11 to Leu-19.	H0581: 1 and H0436: 1.		
970538	6889	3 - 167	16041	Arg-39 to Gly-49.	H0436: 2		
661860	6290	3 - 227	16042	Ser-42 to Ser-52, His-60 to Arg-70.	H0341: 1 and H0436: 1.		
792648	6291	171 - 371	16043	Phe-11 to Cys-17.	H0436: 2		
449136	6292	3 - 260	16044	Pro-26 to Pro-36, Phe-54 to Gly-65.	H0264: 1 and H0436: 1.		
745024	6293	346 - 77	16045		H0436: 1 and H0423: 1.		
836799	6294	16 - 378	16046	Arg-74 to Tyr-80.	H0486: 1 and H0436: 1.		
767257	6295	88 - 180	16047		H0436: 2		
711673	9629	3 - 224	16048	Arg-56 to Ser-65.	L0439: 2, T0041: 1, H0436: 1q21-q22	121-q22	104770, 107670,

110700, 135940, 145001, 146790, 152445, 152445, 159401, 159440, 174000, 179755, 182860, 182860, 182860, 186780, 191030, 191315, 230800, 230800, 266200, 600897, 600923, 601105, 601412, 601652, 602491													_						
															<b>-</b>				
1 and L0748: 1.	H0436: 1 and H0444: 1	H0436: 1 and H0423: 1	H0436: 2 and L0751: 1.			H0306: 1 and H0436: 1.	S0116: 1, H0421: 1 and	H0436: 1.		H0436: 5		110467. 1 1 11040C. 1	H0457: 1 and H0430: 1.			H0436: 4	H0436: 2	S0114: 1, H0063: 1 and H0436: 1	H0402: 1 and H0436: 1.
	Glu-1 to Ala-6.		Ser-18 to Phe-27,	Ser-30 to Ser-40,	Thr-50 to Lys-55.	Thr-45 to Gly-53.	Asp-6 to Gly-12,	Gln-23 to Gln-29,	Arg-37 to Gly-49.	Lys-25 to Trp-31,	Arg-43 to Pro-53,	Cl., 21 to Cl., 20	Gitt-51 to Giy-58,	Sel-45 to Aug-50, Glv-56 to IIe-62	Pro-70 to Cys-81.	Pro-13 to Val-18, Pro-20 to Trp-29.		Pro-77 to Thr-86.	
	16049	16050	16051			16052	16053			16054		16055	00001			16056	16057	16058	16059
	3 - 182	210 - 353	661 - 434			3 - 164	85 - 243			2 - 205		971 170	0/4-477			216 - 332	139 - 282	195 - 536	105 - 278
	6297	6298	6299			6300	6301			6302		6303	coco			6304	6305	9089	6307
	625458	666305	918641			708908	767253			869499		034270	017000			625899	869498	917272	757593
	HTWEX09	HTWEX18	HTWEY30			HTWFB37	HTWFB75			HTWFF46		HTWEGAA	FFO TW TIT			HTWFI19	HTWFK15	HTWFM20	HTWFN64

H0542: 2, H0402: 1, H0318: 1, H0436: 1, L0753: 1 and L0758: 1.	H0436; 2	H0402: 1, H0264: 1 and	H0436: 1.	H0402: 1 and H0436: 1.	H0264: 1 and H0436: 1.	H0576: 2, S0002: 1 and 5,0599: 1.	H0576; 2	H0576: 2	H0576; 2	H0583: 1 and H0576: 1.	H0576; 2	H0556: 1 and H0576: 1.	H0576: 1 and H0444: 1.	H0255: 1, H0576: 1 and	H0423: 1.	H0402: 1, H0576: 1 and H0423: 1.	H0576; 1 and H0445; 1.	S0114: 1, H0576: 1 and L0750: 1.	H0402: 2 and H0576: 1.	H0576: 2 and L0776: 1.	H0254: 1, H0576: 1 and H0422: 1.	S0114: 1 and H0576: 1.	H0589: 1 and H0576: 1.
1, 100	His-9 to Gly-14.		·H		H	H	Gly-30 to Gln-37.	His-25 to Asn-35.	_	Ser-11 to Gly-20.	Glu-3 to Glu-13, H			Gln-5 to Phe-10.	H0	H	Trp-4 to Ser-9, H	.07 .0S	H	Thr-25 to Thr-32, H	<u> </u>	)S	Pro-1 to Trp-6.
16060	16061	16062		16063	16064	16065	16066	16067	16068	16069	16070	16071	16072	16073		16074	16075	16076	16077	16078	16079	16080	16081
75 - 131	3 - 209	79 - 309		272 - 400	20 - 253	281 - 538	130 - 279	70 - 216	139 - 258	49 - 207	3 - 77	200 - 334	197 - 361	204 - 443		78 - 248	68 - 265	243 - 368	68 - 250	43 - 192	253 - 342	1 - 93	21 - 131
6308	6309	6310		6311	6312	6313	6314	6315	6316	6317	6318	6319	6320	6321		6322	6323	6324	6325	6326	6327	6328	6329
658473	869489	916562		721768	269899	954881	812705	780990	796259	715081	767134	757125	693116	576164		745182	812698	789487	850055	717592	668466	698335	691882
HTWFO63	HTWFP14	HTWFP33		HTWFP53	HTWFR17	HTWJA24	HTWJA59	HTWJA83	HTWJA95	HTWJC43	HTWJC75	HTWJC85	HTWJF59	HTWJF66		HTWJF95	HTWJH57	нтwлг91	HTWJM05	HTWJ045	HTWJQ19	HTWJY82	HTWKG30

																								í							
																								-							
H0576: 2			H0576: 2	S0053: 1, H0576: 1 and 1.0748: 1	S0426: 1 and H0576: 1.	H0265: 2 and H0576: 1.	S0053: 1 and H0576: 1.	H0255: 1 and H0576: 1.	S0182: 1 and H0576: 1.	H0265: 1 and H0318: 1.	H0265: 2	H0265: 1 and S0114: 1.	H0265: 1 and H0556: 1.	H0265: 2	H0265: 2	L0749: 2, H0265: 1, H0402:	1 and L0667: 1.	H0265: 2	H0265: 1 and S0218: 1,	H0265: 1 and H0421: 1.	H0265: 1 and H0542: 1.	L0777: 2, H0265: 1, H0556:	1, H0255: 1, L0662: 1,	L0375: 1, L0378: 1 and	L0519: 1.	H0265: 2	H0265: 2	H0265: 2 and L0596: 1.	H0265: 2 and H0556: 1.	H0265: 1, H0556: 1, H0457:	H0265: 2
Lys-12 to Met-24,	Pro-43 to Asp-50,	Glu-63 to Ser-68, Pro-73 to Ser-88.		Leu-16 to Val-21.	Phe-5 to Ile-11.			Gln-43 to Gly-53.		Arg-1 to Gly-14.	Leu-30 to Thr-35.		Ser-23 to Gln-40.		Ser-13 to Leu-19.					Lys-25 to Pro-31.		Leu-1 to Gln-19,	Ala-84 to Gly-99,	Pro-128 to Arg-142.			Ser-59 to Gln-64.	Pro-21 to Lys-32.		Cys-122 to His-131.	Val-10 to Cys-17.
16082			16083	16084	16085	16086	16087	16088	16089	16090	16091	16092	16093	16094	16095	16096		16097	16098	16099	16100	16101				16102	16103	16104	16105	16106	16107
3 - 269		,	44 - 118	29 - 265	109 - 294	234 - 365	89 - 400	2 - 160	267 - 539	7 - 264	174 - 347	15 - 92	98 - 277	2 - 151	17 - 232	227 - 361		1 - 123	3 - 101	176 - 400	2 - 193	146 - 592				91 - 195	120 - 353	199 - 402	56 - 175	188 - 589	50 - 265
6330			6331	6332	6333	6334	6335	6336	6337	6338	6339	6340	6341	6342	6343	6344		6345	6346	6347	6348	6349				6350	6351	6352	6353	6354	6355
728014			709451	574092	614980	529749	841951	656772	795694	869460	530137	9869/9	963029	418592	529759	706472		869401	781443	967750	869461	970855				529662	529661	529615	952022	765655	522365
HTWKN53			HTWKT61	HTWKX27	HTWKZ04	HTWKZ17	HTWLD37	HTWLG13	HTWLG76	HTXAK52	HTXAK78	HTXA023	HTXBF75	HTXBH24	HTXBJ36	HTXBJ92		HTXBK75	HTXBN83	HTXB011	HTXB021	HTXB051				HTXBX49	HTXBX77	HTXCB32	HTXCL28	HTXCU76	HTXCW16

																						138190, 254210,	271900, 600179,	601777			
																						17p13					
H0265: 1 and H0522: 1.	H0265: 1 and H0556: 1.	H0265: 2	H0265: 2	H0265: 2	AR051: 14, AR050: 13	H0265: 1, L0637: 1, L0766: 1 and H0521: 1.	H0265: 2	H0265: 2	H0265: 1 and H0556: 1.	H0265: 2	H0265: 1, H0583: 1 and	L0741: 1.	AR061: 6, AR089; 3	H0265: 1, H0264: 1, H0488:	1 and H0543: 1.	H0265: 1 and H0556: 1.	H0265: 2 and S0134: 1.	H0265: 2	H0265: 1 and S0428: 1.	H0265: 2 and L0589: 1.	H0265: 1 and H0264: 1.	H0265: 2			H0265: 2		
		Arg-12 to Gly-21, Ala-23 to His-32, Ala-59 to Ghr-71.		Glu-14 to Asp-19.	Arg-5 to Gly-13.		Ser-28 to Val-34, Leu-43 to Arg-48.		Ser-4 to Ser-15.	Pro-1 to Lys-9.	Tyr-17 to Asp-22,	Pro-75 to Ser-81.	Arg-1 to Asp-16.			Leu-20 to His-31.		Thr-1 to Trp-10, Phe-18 to Arg-25.		Thr-1 to Asn-7, Phe-21 to Ser-27.	Pro-26 to Pro-37.	Arg-4 to Pro-11,	I nr-45 to Giu-50.		Gly-1 to Gln-9,	Trp-11 to Arg-21, Glv-26 to Lys-32	Ala-38 to Phe-50.
16108	16109	16110	16111	16112	16113		16114	16115	16116	16117	16118		16119			16120	16121	16122	16123	16124	16125	16126			16127		
378 - 166	148 - 303	1 - 231	2 - 241	213 - 416	71 - 466		86 - 235	120 - 314	1 - 306	2 - 82	1145 - 432		1 - 423			307 - 513	62 - 223	198 - 422	22 - 294	118 - 369	2 - 157	109 - 261			3 - 194		
6356	6357	6358	6329	6360	6361		6362	6363	6364	6365	9989		6367			6368	6369	6370	6371	6372	6373	6374			6375		
491257	932476	537413	924996	537485	988896		537474	537487	869369	869435	885996		784768			931113	921486	974530	812833	529755	537405	764221			537483		
HTXCW27	HTXCX05	HTXCY16	HTXCY84	HTXCZ16	HTXDG37		HTXDI51	HTXD050	HTXDQ25	HTXDS80	HTXDW14		HTXDX61			HTXDX82	HTXDZ01	HTXEA41	HTXEA62	HTXEC53	HTXEE70	HTXEM54			HIXEP20		

L0589: 2, H0265: 1 and H0090: 1.	H0265: 1, H0305: 1 and S0426: 1	H0265: 2 and H0305: 1.	H0265: 2	H0265: 1 and H0556: 1.	H0265: 1 and S0053: 1.	H0265: 2	H0265: 2, S0134: 1, S0474:	1, L0662: 1, H0576: 1 and 1.0599: 1	H0265: 1 and H0556: 1.	H0265: 2		H0265: 1, H0556: 1 and	L0749: 1.	H0265: 2	H0556: 20, H0265: 8,	H0638: 1, H0660: 1, H0521:	1 and LU/49: 1.	H0265: 1, H0318: 1 and L0748: 1.	H0265: 2 and H0556: 1.				H0265: 2	H0265: 2		H0265: 2	H0265: 1, H0556: 1 and	H0607: 1.	H0265: 1 and H0370: 1.	H0265: 1, H0556: 1 and
						Lys-5 to Ala-11.	Pro-15 to Gly-32.		Pro-34 to Phe-40.	Trp-21 to Gln-26,	Thr-37 to Ser-43, Glu-78 to Cys-84.	Gln-27 to Arg-32.	00 12 7 60 0	Ser-23 to 1 hr-28.				Lys-18 to Pro-26.	Pro-27 to Ser-32,	Glu-41 to Ser-47,	His-85 to Trp-90,	Glu-92 to Val-111.		Thr-8 to Trp-19,	Glu-24 to Tyr-29.	Tyr-12 to Tyr-24.	Val-7 to Phe-14,	Glu-32 to Glu-39.	Asp-9 to Lys-14.	Pro-22 to Val-30.
16128	16129	16130	16131	16132	16133	16134	16135		16136	16137		16138	16120	10139	16140			16141	16142				16143	16144		16145	16146		16147	16148
191 - 400	114 - 365	65 - 235	3 - 191	68 - 211	1 - 174	37 - 219	176-316		3 - 263	3 - 332		254 - 430	04 221	94 - 231	189 - 464			399 - 653	91 - 438				145 - 258	2 - 151		108 - 218	3 - 476		442 - 549	23 - 325
6376	6377	6378	6379	6380	6381	6382	6383		6384	6385		9869	7073	028/	6388			6389	6390				6391	6392		6393	6394		6395	9689
722181	527697	932471	537471	783784	664468	932437	924995		869408	537399	-	918644	527401	32/401	790855			615593	973429				780083	557838		523385	869397		926534	796025
HTXEP49	HTXEP76	HTXEQ05	HTXET61	HTXET67	HTXET75	HTXEW14	HTXFB03		HTXFB78	HTXFB95		HTXFC07	HTVED75	C/CJVIII	HTXFE47			HTXFF04	HTXFF66				HTXFF91	HTXFI58		HTXFK45	HTXFN69		HTXFQ65	HTXFS95

	.65: 1 and	10556: 1.		H0556: 1.	65: 1, H0589:		40556: 1.	H0556: 2.	10318: 1.		30114: 1.		10556: 1.	1 and H0556: 1.		25: 1, L0603:		20: 1, L0794:	10556: 1.	21: 1 and		55: 1, H0556;				10556: 1.		6: 1, H0255:	10556: 1.
S0216: 1.	H0556: 7, H0265: 1 and L0748: 1.	H0265: 1 and H0556: 1.	H0265: 2	H0265: 1 and H0556: 1	H0305: 2, H0265: 1, H0589:	1 and L0592: 1.	H0265: 2 and H0556: 1	H0265: 2 and H0556: 2.	H0265: 2 and H0318: 1.	H0265: 2	H0265: 1 and S0114: 1	H0265: 2	H0265: 2 and H0556: 1	H0265: 1 and I	H0556: 2	H0556: 1, H0625: 1, L0603:	1 and L0697: 1.	H0556: 1, L0520: 1, L0794:	H0265: 1 and H0556: 1.	H0556: 1, H0421: 1 and	L0766: 1.	H0543: 2, H0265: 1, H0556:	1 and H0423: 1.		TIOOTI	HU265: 1 and HU556: 1	H0556: 3	L0742: 2, H0556: 1, H0255:	H0265: 1 and H0556: 1
		Ala-1 to Cys-9, Cys-13 to Gly-18.			Met-26 to Pro-39.		Gly-5 to Leu-12.				Gly-40 to Lys-46.	Gly-17 to Gln-23.		Lys-41 to Leu-51.		Gly-60 to Gly-67.		Thr-11 to Tyr-19, Phe-32 to Phe-38			٨	Lys-1 to Gly-20,	Leu-31 to Phe-36,	Met-39 to Gly-48,	GIn-5 / to Arg-6 /.		Ser-24 to Lys-31, Val-45 to Ser-50	Gly-19 to Gly-24, Ser-75 to Gly-83	Val-37 to Glu-42.
	16149	16150	16151	16152	16153		16154	16155	16156	16157	16158	16159	16160	16161	16162	16163		16164	16165	16166		16167			16160	10100	16169	16170	16171
	2 - 100	2 - 244	167 - 322	1 - 93	182 - 448		63 - 185	15 - 242	246 - 500	1 - 84	49 - 306	46 - 351	53 - 274	26 - 238	131 - 277	43 - 348		1 - 177	166 - 318	106 - 456		161 - 379			712 225	212 - 333	265 - 414	2 - 307	152 - 304
	6397	6398	6399	6400	6401		6402	6403	6404	6405	6406	6407	6408	6409	6410	6411		6412	6413	6414		6415			6416	0410	6417	6418	6419
	924952	923937	537491	933878	577711		529724	529745	527016	869391	575461	661818	727469	698461	650099	89//0/		995999	745813	692607		933230			074010	274010	6/5315	752160	582143
	HTXFT03	HTXFT60	HTXFV22	HTXGB20	HTXGB65		HTXGD30	HTXGL73	HTXGN76	HTXG074	HTXGQ37	HTXHA16	HTXHD24	HTXJA66	HTXJB15	HTXJB35		HTXJC65	HTXJE76	HTXJF30		HTXJG06			HTV1G10	TINTOGO	H1XJG23	HTXJG53	HTXJH73

H0556: 2	H0556: 2	H0556: 1 and S0002: 1.	S0052: 3, H0556: 1 and L0777: 1.	H0556: 1, H0650: 1 and	LU/59: 1. H0556: 2	AR051: 46, AR050: 46,	AR054: 28	H0556: 2 and H0265: 1.	H0556: 1 and S0002: 1.	H0265: 1 and H0556: 1.	H0556: 2	H0556: 2 and L0599: 1.	H0265: 1, H0556: 1 and H0635: 1	H0556: 1 and S0052: 1.	H0265: 1 and H0556: 1.	H0556: 1, H0581: 1 and H0445: 1.	H0265: 1 and H0556: 1.	H0556: 1 and S0216: 1.	H0556: 1, S0052: 1 and	H0521: 1.	H0556: 2	H0556: 4, H0265: 2 and	L0601: 1.	H0265: 1 and H0556: 1.	H0556: 2
Ile-2 to Cys-14, Asp-38 to Leu-43.		Pro-7 to Pro-14, Pro-55 to Ser-61, Gly-70 to Asp-76.			Glv-3 to Pro-11.	Ser-41 to Ser-49,	Gly-77 to Arg-83,	Arg-91 to Arg-96.	Gln-13 to Thr-18.	Arg-8 to Asp-17.	Pro-20 to Arg-28.	Arg-52 to Ser-57, Gly-67 to Cys-78.		Ile-7 to Ser-12.		Gln-5 to Arg-12, Arg-16 to Cvs-27.	Leu-21 to Glu-32, Glv-39 to Ser-63	Lys-1 to Thr-10.	Lys-1 to His-7,	Cys-37 to Arg-43.	Lys-19 to Thr-30.			Pro-10 to Lys-16, Asn-22 to Pro-33.	
16172	16173	16174	16175	16176	16177	16178			16179	16180	16181	16182	16183	16184	16185	16186	16187	16188	16189		16190	16191		16192	16193
1 - 297	61 - 288	77 - 340	116 - 334	259 - 483	1 - 138	298 - 684			79 - 288	82 - 225	2 - 361	24 - 341	35 - 355	373 - 513	3 - 182	430 - 570	235 - 726	2 - 295	8 - 229		135 - 326	90 - 233		1 - 285	202 - 330
6420	6421	6422	6423	6424	6425	6426			6427	6428	6429	6430	6431	6432	6433	6434	6435	6436	6437		6438	6439		6440	6441
912611	959169	675782	916254	169616	783572	566887			752940	703973	663153	869123	974315	719077	739586	746481	867083	859854	872233		841986	529756		743435	720186
HTXJI68	HTXJJ55	HTXJK23	HTXJL01	HTXJL02	HTXJM73	HTXJN04			HTXJN68	HTXJO34	HTXJ061	HTXJ085	HTXJP28	HTXJQ73	HTXJR67	HTXJS64	HTXJV49	HTXJW56	HTXJY51		HTXKB42	HTXKC23		HTXKD62	HTXKH47

					147440, 201470, 235800, 273300							121011, 121011,	129500, 253700, 601885, 602221									
12					12q22							13q12	!							-		
H0265: 1, H0556: 1 and L0748: 1.	H0265: 1, H0556: 1 and L0543: 1.	H0271: 7, H0556: 1 and H0416: 1.	H0556: 2	H0556: 2	H0556: 1, S0278: 1, L0805: 12q22 1 and H0422: 1.	H0265: 1 and H0556: 1.	H0265: 1 and H0556: 1.	H0556: 3	L0439: 4 and H0556: 2.	H0556: 1, S0218: 1 and	L0754: 1.	AR061: 2, AR089: 2	H0265: 1 and H0556: 1.	H0556: 2	H0556: 2 and L0757: 1.	H0556: 2	H0556: 3 and H0445: 1.	H0063: 2 and H0556: 1.	H0556: 1, S0114: 1 and	S0116: 1.	H0556: 2 and S0052: 1.	
Cys-9 to Gly-14.	His-2 to His-7.	Arg-1 to Leu-11, Ser-54 to Val-59, Gly-61 to Tyr-67, Pro-76 to Pro-94, Glu-99 to Ala-104.	Thr-7 to Trp-15, Pro-19 to Ile-25, Gly-42 to Val-47.	Pro-42 to Arg-47.		Glu-1 to Trp-13, His-36 to Arg-41.			Lys-5 to Asn-11.	Glu-22 to His-37,	Phe-67 to Arg-76.	Asp-21 to Lys-26.			Arg-7 to Ala-19.	Arg-1 to Thr-10, Met-25 to Asp-39.			Leu-1 to Ala-6,	Ser-48 to Lys-53.	Tyr-37 to Gly-43,	Arg-45 to Val-52, Lys-63 to Gly-70.
16194	16195	16196	16197	16198	16199	16200	16201	16202	16203	16204		16205		16206	16207	16208	16209	16210	16211		16212	
1 - 264	121 - 315	1 - 486	203 - 385	43 - 234	3 - 347	2 - 175	31 - 216	190 - 309	321 - 452	137 - 364		3 - 305		84 - 293	42 - 410	221 - 376	7 - 192	186 - 305	140 - 409		243 - 491	
6442	6443	6444	6445	6446	6447	6448	6446	6450	6451	6452		6453		6454	6455	6456	6457	6458	6459		6460	
796245	671285	574788	767234	795788	751050	664886	782951	787551	713631	934801		947789		919676	754404	869348	918567	786409	917316		934555	
HTXKI93	HTXKJ55	HTXKJ58	HTXKJ89	HTXKJ95	HTXKK62	HTXKM25	HTXKM84	HTXKN90	HTXKP42	НТХКQ25		HTXKQ55		HTXKS02	HTXKU69	HTXKV16	HTXKV38	HTXKZ89	HTXLA63		HTXLD06	

H0265: 1, H0556: 1 and H0436: 1.	H0265: 1, H0556: 1 and L0545: 1.	H0556: 1, H0300: 1 and H0179: 1.	H0556: 1, H0264: 1, L0804: 1 and H0445: 1.	H0265: 1 and H0556: 1.	H0556: 1, L0665: 1, L0750: 1 and H0445: 1.	H0556: 1 and H0090: 1.		H0265: 2 and H0556: 1.	H0556: 2	H0556: 2 and H0265: 1.	H0556: 2		H0556: 1 and H0271: 1.	L0766: 2, H0556: 1, H0656:	1, H0255: 1, L0740: 1,	L0749: 1, H0444: 1 and L0592: 1.	H0265: 1 and H0556: 1.	H0556: 2	H0556: 3 and H0265: 1.	H0556: 3	H0556: 2 and L0748: 1.	H0556: 2	H0556: 4	H0556: 5 and H0265: 1.		H0556: 2 and H0265: 1.
His-7 to Gly-17, Glu-23 to Ile-31, Ala-38 to Phe-43.		Lys-14 to Ser-19, Gln-36 to Arg-43.	Thr-1 to Lys-10, Glu-36 to Cys-50.	Trp-29 to Arg-35.	Ala-6 to Arg-11.	Arg-28 to Gln-35,	Thr-44 to Lys-51, Lys-55 to Gly-61.				Gln-29 to Gln-35,	Ser-58 to Gln-67.	Arg-36 to Ala-42.				Arg-1 to Ser-15.	Thr-24 to Gln-34.	Pro-41 to Thr-46.				Glu-27 to Met-32.	Glu-14 to His-21,	His-36 to Lys-45.	Ser-8 to Asp-13, Gly-26 to Trp-32,
16213	16214	16215	16216	16217	16218	16219		16220	16221	16222	16223		16224	16225			16226	16227	16228	16229	16230	16231	16232	16233		16234
3 - 272	22 - 228	350 - 535	404 - 670	76 - 420	3 - 119	1-306		392 - 667	275 - 421	277 - 456	178 - 381		401 - 631	249 - 455			161 - 286	1 - 183	114 - 287	3 - 158	126 - 356	167 - 358	206 - 466	67 - 279		1 - 267
6461	6462	6463	6464	6465	6466	6467		6468	6469	6470	6471		6472	6473			6474	6475	6476	6477	6478	6479	6480	6481		6482
752484	790392	861983	862992	774125	958421	790610		974598	869336	974018	787577		756679	840283			795355	773071	786475	951958	918658	869332	869202	973431		869331
HTXLD68	HTXLE37	HTXLE56	HTXLE75	HTXLE79	HTXLF08	HTXLG57		HTXLG64	HTXLH60	HTXLI65	HTXLI91		HTXLJ70	HTXLK35			HTXLK95	HTXLL78	HTXLL89	HTXLN72	HTXL002	HTXL014	HTXLP15	HTXLP18		HTXLQ28

														305450, 309600,	309605, 311360,	314580															
														Xq21																	
	H0556: 1 and H0543: 1.	H0265: 1 and H0556: 1.	H0265: 1 and H0556: 1.	H0556: 2 and S0114: 1.	H0556: 1 and S0114: 1.			H0556: 2 and H0265: 1.	H0265: 1 and H0556: 1.	H0556: 1 and H0069: 1.	H0556: 1 and T0041: 1.	H0556; 2	H0265: 1 and H0556: 1.	H0265: 2, H0556: 1 and	L0748: 1.			H0556: 2 and L0589: 1.	H0556: 2 and L0415: 1.	H0556: 2 and H0265: 1.	H0556: 1, S0218: 1 and	H0591: 1.	H0265: 1 and H0556: 1.	H0556: 2 and H0090: 1.	H0556: 2, H0445: 2, L0748:	1 and H0444; 1.	H0556: 1 and H0063: 1.	H0556: 1, H0063: 1, L0375:	1, L0750: 1 and L0758: 1.	H0556: 2 and H0179: 1.	AR051: 38, AR050: 35,
Arg-44 to Leu-49.	Ser-18 to Asp-24.	Gln-9 to Phe-14, Asn-27 to Asn-32.	Pro-33 to Ser-43, Glu-59 to Phe-64.		Pro-13 to Arg-18,	Leu-39 to Asn-44,	Ser-58 to Tyr-63.	Gln-31 to Phe-36.	Ala-1 to His-7.			Arg-4 to Pro-13, Gly-45 to Val-52.		Asp-1 to Glu-6,	lle-14 to Ala-21,	Pro-49 to Phe-67,	His-73 to Ser-98.	Gln-7 to Ala-17.		Pro-10 to Asn-16.	Asp-1 to Asn-6.		Lys-61 to Ala-66.	Ser-15 to Ala-20.	Ser-22 to Lys-27.		Glu-8 to Lys-13.	Cys-10 to Ala-17,	Thr-39 to Pro-45.	Glu-1 to Asn-9.	Asp-19 to Val-24.
	16235	16236	16237	16238	16239			16240	16241	16242	16243	16244	16245	16246				16247	16248	16249	16250		16251	16252	16253		16254	16255		16256	16257
	1 - 147	63 - 266	1 - 297	210 - 482	185 - 379			181 - 525	319 - 480	528 - 803	82 - 282	1 - 402	141 - 350	2 - 358				2 - 232	210 - 536	291 - 566	115 - 294		50 - 247	2 - 100	578 - 763		3 - 212	247 - 459		253 - 501	522 - 217
	6483	6484	6485	6486	6487			6488	6489	6490	6491	6492	6493	6494				6495	6496	6497	6498		6499	9059	.6501		6502	6503		6504	6505
	197616	783411	779215	972762	866819		_	779198	928105	775487	921101	870456	923001	830027				823172	869319	972759	92776		933376	961472	923005		789063	789332		780129	835044
	HTXLT33	HTXLU64	HTXLU82	HTXLV39	HTXLY02			HTXMC82	HTXMH13	HTXMH80	HTXMI18	HTXMI62	HTXMJ03	HTXMJ50				HTXM028	HTXM081	HTXMP92	HTXMQ07		HTXMT06	HTXMU10	HTXMX03		HTXMX32	HTXMX41		HTXMY15	HTXMY23

			4																												
AR054: 32 H0556: 1 and S0002: 1.		H0556: 2	H0556: 3, H0583: 1 and H0625: 1.	H0556: 1 and S0114: 1.	H0556: 2 and H0265: 1.	H0556: 2	H0556: 3	H0556: 2	H0556: 5, L0766: 2, H0265:	1, H0521: 1 and L0748: 1.	H0556: 2	H0556: 2			H0556: 1 and H0445: 1.	H0556: 3		H0556: 2, H0265: 1, H0255:	1 and H0444: 1.	H0556: 8, H0265: 1, S0114:	1, H0445: 1 and H0542: 1.		L0740: 3, L0777: 2, H0556:	1, S0114: 1 and L0780: 1.	H0265: 1 and H0556: 1.	H0556: 2, L0439: 2, L0438:	1, L0747: 1 and L0749: 1.	H0556: 3	H0556: 2	H0556: 2 and H0179: 1.	H0556: 2 and H0265: 1.
		Ile-33 to Ser-40.							Gly-5 to Leu-10.		•	Gln-17 to Glu-39,	Gln-62 to Lys-67,	Leu-71 to Gln-76.		Pro-1 to Gly-9,	Lys-16 to Cys-27.			Arg-1 to Lys-14,	Glu-37 to Gly-43,	Cys-47 to Gly-57, Ala-103 to Gly-108.	Pro-14 to Pro-28.						Val-27 to Leu-32.	Arg-1 to Gly-7, Phe-11 to Arg-23.	
	19362	16258	16259	16260	16261	16262	16263	16264	16265		16266	16267			16268	16269		16270		16271			16272		16273	16274		16275	16276	16277	16278
	642 - 361	26 - 148	379 - 618	317 - 592	125 - 373	151 - 282	218 - 346	262 - 405	692 - 483		154 - 255	115 - 414			157 - 288	29 - 229		151 - 396	•	45 - 479			182 - 775		509 - 664	481 - 732		3 - 350	67 - 315	36 - 536	394 - 639
	9610	6506	6507	6508	6209	6510	6511	6512	6513		6514	6515			6516	6517		6518		6219			6520		6521	6522		6523	6524	6525	6526
	835045	789619	869311	902682	974048	966045	973993	922997	780965		963444	916249			934303	951939		18781		856465			952165		866698	869189		972837	869289	918076	869280
		HTXMZ91	HTXND08	HTXND91	HTXNF56	HTXNJ80	HTXNM82	HTXNN03	HTXNN33		HTXN048	HTXNO58			90ONXJH	HTXNQ63		HTXNR01		HTXNR17			HTXNT07		HTXNT43	9/LNXLH		HTXNU51	HTXNY70	HTXNY74	HTXOC32

H0556: 1 and H0522: 1.	H0265: 1, H0556: 1, H0657:	l and H0543: 1.	H0556: 2	H0265: 1 and H0556: 1.	H0556: 4	H0265: 2, H0556: 2, H0255:	2 and H0423: 1.	H0265: 1 and H0556: 1.	H0556: 2, L0749: 2, S0218:	l and L0748: 1.	H0556: 3, S0052: 2, S0134:	, H0306: 1 and S0053: 1.	H0556: 2	H0556: 2 and L0595: 1.	H0556: 4	H0556: 3, L0759: 3, S0212:	1 and L0805: 1.	H0556: 7, H0265: 1 and	L0748: 1.	H0556: 2 and H0486: 1.	H0556: 2		H0556: 2	H0556: 1 and H0318: 1.	H0255: 2 and H0556: 1.	H0556; 2	AR051: 33, AR054: 28,	AR050: 24	H0556: 2	H0556: 1 and H0271: 1.	H0556: 2 and H0521: 1.	H0556: 4 and H0265: 1.
	His-2 to Gly-10,	Glu-22 to Arg-28.				Asn-1 to Arg-11,		Met-13 to His-21.	Thr-55 to Gln-61.				Lys-1 to Glu-6.	Pro-46 to Gln-52, Thr-61 to Val-70.	Gln-35 to His-44.				1		Lys-1 to Tyr-11,	Thr-13 to Lys-21, Ser-79 to Arg. 87	Pro-22 to Ser-28.	Arg-8 to Arg-14.	Pro-45 to Ser-53.			7			Ser-1 to Thr-13.	
16279	16280		16281	16282	16283	16284		16285	16286		16287		16288	16289	16290	16291		16292		16293	16294		16295	16296	16297	16298	16299			16300	16301	16302
13 - 234	20 - 358		119 - 295	2 - 172	348 - 554	280 - 477		1 - 108	347 - 535		105 - 410		2 - 148	262 - 591	64 - 255	34 - 198		74 - 433		329 - 547	2 - 262		229 - 414	329 - 553	209 - 553	95 - 289	2 - 178	• •		274 - 486	112 - 450	55 - 231
6527	6528		6529	6530	6531	6532		6533	6534		6535		6536	6537	6538	6539		6540		6541	6542		6543	6544	6545	6546	6547			6548	6549	6550
806643	682626		926909	869271	869279	974039		963435	934248		098868		965090	869253	914739	965558		974034		852057	869252		606906	918556	920274	918566	924976			922877	963397	957888
HTXOD62	HTXOG84		HTXOH04	09НОХДН	HTXOJ50	HTXOJ92		HTXOM10	9000XTH		HTX0083		HTXOR11	HTXOR48	HTXOR86	HTXOS47		HTXOT42		HTXOU06	HTXOU48		HTXOU67	HTXOX02	HTXOX42	HTXOZ02	HTXPF93			HTXPJ03	HTXPK10	HTXPK28

														,															
H0436: 2 and H0556: 1.	H0556: 2	AR054: 10, AR050: 8, AR051: 2	H0265: 2 and H0556: 1.	H0556: 2			AR089: 2, AR061: 2 H0556: 2	H0265: 1 and H0556: 1.	H0556: 2		H0556: 2, H0265: 1 and	L0523: 1.				S0114: 3 and H0556: 1.		H0556: 1 and H0255: 1.	H0556: 3 and H0265: 1.	H0265: 1 and H0556: 1.	H0556: 1 and S0053: 1.	H0556: 2 and L0758: 1.	H0265: 1 and H0556: 1.		H0556: 1 and H0543: 1.	H0556: 2	H0556: 2 and T0041: 1.	H0556: 2	H0556: 1 and H0486: 1.
Gln-23 to Leu-28, Trp-66 to Gln-74.	Thr-30 to Thr-37.			Arg-15 to Ser-21,	Arg-25 to Gly-30,	Lys-/4 to Lys-81.	Pro-46 to Ser-51.		Leu-12 to Glu-24,	Lys-52 to Ala-57.	Leu-7 to Gly-17,	Thr-20 to Glu-29,	Gln-45 to Phe-52,	Phe-56 to Tyr-61,	Glu-102 to Gln-116.	Thr-31 to Pro-38,	Pro-68 to Gln-73.	Arg-37 to Tyr-44.	Ser-2 to Ser-8.		Thr-5 to Gly-10, Glu-52 to Leu-60.	Pro-6 to Gly-12.	Met-11 to His-26,	Ser-62 to Ser-67, Ala-71 to Pro-77.					Gln-1 to Gly-9, Lys-47 to Ser-53.
16303	16304	16305		16306			16307	16308	16309		16310					16311		16312	16313	16314	16315	16316	16317		16318	16319	16320	16321	16322
114 - 350	330 - 518	3 - 635		36 - 320			2 - 469	94 - 330	252 - 485		117 - 470					375 - 605		337 - 522	444 - 698	386 - 541	121 - 303	1 - 447	2 - 421		43 - 189	196 - 459	105 - 386	221 - 397	20 - 193
6551	6552	6553		6554			6555	6556	6557		6558	1				6559		6560	6561	6562	6563	6564	6565		9959	6567	8959	6959	0259
869224	869214	799925		869221			870074	922884	869198		918494					869184		961161	974033	963403	965645	963503	869139		952030	918081	869134	962296	869133
HTXPO91	HTXPO92	HTXPP33		HTXPR92			HTXPT68	HTXPW03	HTXPW20		HTXPX02					HTXQA18		HTXQC36	HTXQC77	HTXQF10	HTXQM11	HTXQN24	HTXQR90		HTXQU07	HTXQW02	HTXQW29	HTXRA11	HTXRB38

							301220, 302350,	306400, 309470, 309585, 311250, 312040, 312610,	314850											
							Xp21.1													
H0556: 2 and S0218: 1.	H0556: 1 and H0069: 1.	H0556: 2	H0556: 1 and H0318: 1.	AR061: 2, AR089: 1 H0556: 3	H0556: 2	H0556: 1, H0650: 1 and L0731: 1.	H0556: 1 and H0521: 1.			AR089: 0, AR061: 0 H0265: 1, H0556: 1 and H0083: 1.	S0216: 1 and S0452: 1.	H0116: 2	H0581: 1, H0116: 1 and L0746: 1	S3018: 2 and S0140: 1.	H0650: 2	L0766: 4, H0318: 3, H0650:	1, L0772: 1 and L0774: 1.	H0457: 4, H0650: 1, H0656:	1, H0255: 1, H0641: 1 and	LU/06; 1.
Ghr-7 to Lys-13, Trp-65 to Thr-72.	Pro-11 to Ala-18, Ser-38 to Arg-44, Lys-59 to Pro-68.	Gln-1 to Pro-10, Pro-32 to Arg-50.	Ser-5 to Ser-15, Gly-73 to Asp-86.			Lys-26 to Glu-31, Ala-42 to Tyr-49, Glu-79 to Trp-95.	Glu-4 to Ser-14,	Asp-20 to Leu-25.			Leu-21 to Gly-27, Pro-39 to Lvs-57.	Val-1 to Ile-8, Glu-64 to Leu-72.		Thr-1 to Val-7.	Gly-79 to Cys-84.	Tyr-2 to Thr-8,	Lys-65 to Lys-71.	Arg-1 to Trp-7,	Arg-14 to Cys-32,	Gin-65 to Leu-75.
16323	16324	16325	16326	16327	16328	16329	16330			16331	16332	16333	16334	16335	16336	16337		16338		
91 - 330	13 - 219	3 - 227	1 - 321	3 - 578	99 - 206	541 - 846	298 - 462			132 - 428	451 - 251	26 - 250	1 - 258	382 - 648	3 - 353	215 - 3		631 - 1323		
6571	6572	6573	6574	6575	6576	6577	6578			6229	6580	6581	6582	6583	6584	6585		9859		
973981	921285	926371	918031	975072	918009	914627	915903			973095	869119	768350	702994	973811	878465	951873		911399		
HTXRC17	HTXRD51	HTXRE04	HTXRJ02	HTXRM86	HTXRO02	HTXSB88	HTXSK91			HTXSR92	HTYNC52	HTYSB62	HTYSD32	HTZAB04	HUJAB25	HUJAG07		HUJAM39		

										31 188826 250100										
		Sp15.33								22a13 2-a13 31										
H0650: 1 and H0318: 1.	H0318: 2, H0650: 1 and H0488: 1.	H0585: 2 and H0650: 1.	H0265: 1, H0556: 1 and H0650: 1.	H0650: 1 and H0580: 1.	H0650: 1, H0318: 1 and H0090: 1.	S0114: 1 and H0650: 1.	H0656: 2, L0749: 2, H0657: 1 and H0264: 1.	H0656: 2 and H0318: 1.	H0656: 2 and H0486: 1	H0656: 2, 1,0748: 1 and	L0757: 1.	H0254: 2 and H0656: 1	H0656: 1 and S0053: 1	H0656: 2	H0656: 2	H0656: 2	H0656: 1, H0581: 1, H0591:	1 and H0521: 1.		
		Arg-9 to Trp-15, Ser-36 to Lys-49, Glu-95 to Ala-104, Pro-113 to His-118, Arg-124 to Gly-130, Arg-146 to Asp-153, Arg-159 to Arg-168.	Pro-35 to Pro-40.	Arg-1 to Met-8.			Ser-13 to Arg-20, Glu-23 to His-28.	Cys-14 to His-23,	Ser. 42 to Pro. 47	Gly-1 to Ser-9.	Arg-19 to Arg-28, Ala-36 to Gly-43,	361-/3 (0 r10-/0.	Val-39 to Asn-44.				Thr-40 to Lys-48,	Lys-53 to Glu-58,	Sel - / 4 to Sel - 80;   Phe-82 to Leu-91.	Lys-141 to Asp-146, Arg-161 to Asp-167,
16339	16340	16341	16342	16343	16344	16345	16346	16347	16348	16349		.16350	16351	16352	16353	16354	16355			
1 - 195	2 - 265	2 - 733	304 - 606	3 - 329	579 - 773	12 - 359	552 - 764	168 - 650	3-656	88 - 396		80 - 316	115 - 354	158 - 361	3 - 53	247 - 429	1 - 585			
6587	8859	6589	0659	6591	6592	6593	6594	6595	9659	6597		6598	6599	0099	6601	6602	6099			
951874	958914	957784	933920	926175	957786	920851	914330	966685	968953	966816		921559	933322	951824	969258	957715	915269			
HUJBL07	HUJCB67	HUJCM08	HUJCT61	HUJCV04	HUJDB08	HUJDI58	HUUAJ10	HUUAP82	HUUAS12	HUUAV06		HUUAV83	HUUCI06	HUUCI07	HUUCO12	HUUCP08	нопсов			

	H0656: 2	H0656: 1 and H0306: 1.	H0656: 2	H0650: 1 and H0656: 1.	H0265: 1, H0556: 1, S0114:	1, H0581: 1, L0532: 1,	L0758: 1 and L0599: 1.	H0370: 1 and H0581: 1.		H0581: 1 and S0053: 1.	H0485: 1 and H0581: 1.	AR089: 5, AR061: 2	H0583: 1, H0581: 1 and	H0083: 1.	H0581: 1 and H0457: 1.	H0581: 1 and H0457: 1.						H0265: 1 and H0581: 1.	H0635: 1, H0581: 1, L0545:	1, L0748: 1 and L0591: 1.	H0581: 2 and S0116: 1.	H0402: 1 and H0581: 1.	H0581: 1 and H0423: 1.	H0069: 1 and H0581: 1.	H0581: 1 and H0521: 1.	H0581: 2	H0581: 2
Asp-177 to Lys-183.	Gln-9 to Thr-16, Pro-36 to Glu-52.	Asn-18 to Gly-38.						Asp-21 to Gly-26,	Leu-50 to Ser-57.		Asp-28 to Thr-34.		Ser-40 to Asp-46.		Lys-6 to Gly-13.	Gly-8 to Trp-13,	Pro-34 to Thr-46,	Glu-66 to Pro-79,	Ala-85 to Ala-100,	Gln-102 to Glu-120,	Glu-143 to Gln-156, Ser-168 to Ser-177.				Phe-44 to Gln-53.	Gln-1 to Gln-7.		Leu-72 to Phe-79.	Gly-8 to Ala-18, Thr-92 to Thr-100.		Val-22 to Gly-36, Pro-48 to His-53.
	16356	16357	16358	16359	16360			16361		16362	16363	16364			16365	16366						16367	16368		16369	16370	16371	16372	16373	16374	16375
	86 - 502	148 - 267	420 - 524	89 - 238	497 - 706		_	98 - 349		87 - 287	2 - 313	3 - 320			177 - 34	2 - 550		-				131 - 295	136 - 384		195 - 353	2 - 127	176 - 373	83 - 382	2 - 382	1 - 150	406 - 182
	6604	6605	9099	6607	8099			6099		6610	6611	6612			6613	6614						6615	9199		6617	6618	6199	6620	6621	6622	6623
	286596	957721	961717	961706	928519			719194		778917	721151	908541			712203	697716						614973	675712		915621	935602	923734	829878	820088	751418	838096
	HUUCS49	HUUDG08	HUUDJ10	HUUDS10	HWAAE23			HWAAE55		HWAAE90	HWAAF27	HWAAF66			HWAAF81	HWAAL31						HWAAM04	HWAAM23		HWAAR36	HWAAW74	HWAAY03	HWABA49	HWABB37	HWABE67	HWABE94

		ı																													
					:												ſ														
H0581: 1 and H0422: 1.	S0114: 1, H0581: 1, H0264: 1 and S0053: 1.	H0581: 2	H0581: 2, H0625: 1, S0428: 1, H0436: 1 and H0423: 1.	S0116: 1 and H0581: 1.	H0581: 2	H0581: 1 and S0052: 1.	H0581: 1 and H0444: 1.	H0581: 1 and H0487: 1.	H0581: 1 and S0142: 1.	H0581: 1 and H0522: 1.		S0114 1 and H0581 1	TIOCOL 1 TIOCOL: 1.	HUS81: 1 and HU445: 1.		AR054: 255, AR050: 206,	AR051: 141	H0271: 18, H0556: 9,	H0265: 8, H0581: 8, L0761:	4, H0543: 4, H0422: 4,	H0656: 3, H0457: 3, L0766:	3, T0002: 2, L0748: 2,	H0220: 1, H0650: 1, S0282:	1, H0610: 1, H0069: 1,	H0635: 1, H0179: 1, H0416:	1, H0031: 1, H0090: 1,	T0041: 1, H0560: 1, H0529:	1, L0667: 1, L0649: 1,	L0803: 1, L0659: 1, L0666:	1, S0052: 1, S0216: 1,	HU/UZ: 1, HUJ18: 1, HUJ21:
Ser-2 to Gly-9.		Arg-15 to Tyr-21, Pro-30 to Gln-41.			Phe-13 to Cys-18.			Lys-15 to Pro-20.	Arg-11 to Cys-16.	Ser-14 to Lys-31,	Pro-41 to Glu-55,	Lys-03 to Olu-12.	1 0 1 m 10	Asn-8 to 1 hr-16, Ser-28 to Phe-34.	Thr-76 to Gly-85.	Asp-81 to Ile-89,	Asn-112 to Ser-125,	Leu-179 to Ser-189.													
16376	16377	16378	16379	16380	16381	16382	16383	16384	16385	16386		16387	10001	16388		16389															
64 - 231	38 - 211	3 - 125	15 - 206	3 - 209	1 - 117	3 - 212	561 - 830	120 - 290	74 - 265	103 - 345		119 - 262	201 500	7/5-187		2 - 577								•			·····	_		***	
6624	6625	6626	6627	6628	6629	6630	6631	6632	6633	6634		5899	500	9599		6637															
698131	529803	734536	494837	719221	784211	919441	659944	703861	865145	685187		752825	20070	/ 58896		943074															
HWABF91	HWABI18	HWABQ57	HWABS04	HWABS51	HWABT82	HWABW02	HWABW15	HWABW34	HWABW78	HWABX49		HWARX68	TIVE A TAXA	HWABY12		HWACA38															

							,																									
1, L0750: 1, H0445: 1,	H0423: 1, H0677: 1 and	H0506: 1.	S0114: 1 and H0581: 1.	H0581: 2	H0581: 2 and L0697: 1.	H0581: 2	S0114: 1, H0581: 1 and	H0543: 1.	H0581: 1 and S0052: 1.	H0581: 2	:	S0114: 1 and H0581: 1.	H0581: 1 and H0422: 1.	H0581: 1 and H0264: 1.	H0581: 2	H0581: 3 and H0580: 1.	H0581: 2	H0581: 2	H0581: 2 and H0436: 1.	H0581: 1 and S0052: 1.	H0581: 2, L0439: 2, H0318:	H0581: 1 and H0421: 1.	AR050: 78, AR054: 61,	AR051: 60, AR061: 2,	AR089: 1	H0581: 2, S0114: 1 and	L0362: 1.	S0114: 1 and H0581: 1.	S0218: 1 and H0581: 1.	H0581: 2	H0581: 2	L0748: 3, H0581: 2 and
			Ile-22 to Asn-32, Gly-36 to Asp-49.		Arg-38 to Ser-47.	Arg-41 to Gly-48.				Pro-8 to Ser-14,	Ser-55 to Lys-60.	Lys-37 to Ala-43.							Thr-9 to Leu-15.				Ala-45 to Asp-53,	Asn-57 to Asp-68,	Glu-84 to Cys-92,	Asn-97 to Ser-105.		Asn-25 to Gly-30.		Gly-20 to Asp-26.		Ala-1 to Tyr-8,
			16390	16391	16392	16393	16394		16395	16396		16397	16398	16399	16400	16401	16402	16403	16404	16405	16406	16407	16408				,	16409	16410	16411	16412	16413
			273 - 461	216 - 1	192 - 356	163 - 351	185 - 322		76 - 264	128 - 349		31 - 222	2 - 148	3 - 320	193 - 528	212 - 403	1 - 117	116 - 259	177 - 85	61 - 186	236 - 493	327 - 446	1099 - 506					120 - 350	226 - 423	300 - 605	154 - 369	41 - 298
			8638	6639	6640	6641	6642		6643	6644		6645	6646	6647	6648	6649	0599	6651	6652	6653	6654	6655	9599		•			6657	6658	6999	0999	6661
			685247	868530	675517	752710	670912		686740	722572		753565	662307	869938	668093	685983	77177	787349	927275	705560	647703	709487	957347			-		915567	680182	958200	698651	727820
			HWACB75	HWACG21	HWACG64	HWACG68	HWACG94		HWACH33	HWACH49		HWACK78	HWACM17	HWACP03	HWACQ19	HWACR28	HWACR77	HWACU96	HWACV04	HWACX82	HWADA93	HWADE38	HWADF26					HWADG01	HWADG26	HWADG27	HWADI32	HWADI53

			_																			4										9:
H0402: 1.	H0581: 1 and H0444: 1.	H0581: 2	H0581: 1 and H0521: 1.			S0114: 1 and H0581: 1.		H0457: 2 and H0581: 1.	H0250: 1 and H0581: 1.	H0271: 2 and H0581: 1.	H0581: 2 and H0264: 1.	S0114: 1 and H0581: 1.								H0318: 1 and H0581: 1.	H0581: 2	S0212: 1 and H0581: 1.	H0581: 2, L0790: 1 and S0428: 1.	H0581: 2, L0805: 1 and	H0521: 1.	H0581: 1 and H0436: 1.	H0581: 1 and H0271: 1.	H0581: 1, L0743: 1 and H0543: 1.	H0265: 1 and H0581: 1.		H0581: 2 and H0583: 1.	H0581: 1, H0063: 1, H0436:
Asp-33 to Ser-38.		Phe-12 to Thr-17.	Pro-11 to Ile-16,	Ile-40 to Cys-51,	Gly-62 to 1 yr-67.	Ser-2 to Pro-8,	Phe-16 to Cys-22.	Leu-33 to Lys-50.	Cys-1 to Arg-6.			Pro-20 to Gln-25,	Ser-31 to Cys-36,	Leu-39 to Ser-52,	Val-64 to Ser-73,	Ala-89 to Glu-98,	Ser-100 to Glu-109,	Val-113 to Gln-119,	Lys-146 to Pro-151.			Leu-1 to Trp-6.	Tyr-18 to Cys-27.	Asp-17 to Asn-23.				Gly-35 to Thr-40.	Glu-1 to Pro-9,	Pro-37 to Lys-42.	Glu-6 to Ser-14, Thr-39 to Gln-45.	Thr-5 to Lys-17.
	16414	16415	16416			16417		16418	16419	16420	16421	16422								16423	16424	16425	16426	16427		16428	16429	16430	16431		16432	16433
	109 - 285	48 - 143	38 - 292			97 - 297		29 <i>7 -</i> 109	203 - 418	264 - 572	253 - 393	3 - 635			,					444 - 584	212 - 358	109 - 252	12 - 185	1 - 105		3 - 326	251 - 382	2 - 334	337 - 570		218 - 424	2 - 262
	6662	6999	6664			9999		9999	2999	8999	6999	0/99								6671	6672	6673	6674	6675		9299	6677	8299	6299		0899	6681
	690074	918986	269902			868520		657528	670274	924888	729136	680211								682448	693834	944042	675454	717544		916669	708688	722343	718647		868509	738874
	HWADJ29	HWADL02	HWADL36			HWADM30		HWADN19	HWADN21	HWADN46	HWADO54	HWADP26								HWADQ27	HWADQ91	HWADR47	HWADS43	HWADS53		HWADV51	HWADV82	HWADW41	HWADX46		HWADX62	HWADY59

1, H0444: 1 and L0599: 1.	H0581: 1 and S0142: 1.	H0581: 2	S0218: 1 and H0581: 1.	H0581: 1 and H0445: 1.	S0114: 1 and H0581: 1.	H0581: 1 and H0457: 1.	H0581: 3, H0318: 2, L0766:	2, L0438; 2, L0439; 2,	L0758: 2, H0485: 1, L0451:	1, L0542: 1, L0745: 1 and	H0543: 1.	H0581; 1 and H0444; 1.	H0581: 2 and H0543: 2.	H0580: 1, H0581: 1 and	L0748: 1.	H0402: 1 and H0581: 1.			, !	S0114: 1, H0402: 1 and H0581: 1.	H0581: 1 and H0090: 1.	S0134: 1 and H0581: 1.	H0581: 2		AR089: 2, AR061: 1 H0255: 1 and H0581: 1.	H0581: 1 and H0543: 1.	H0581: 2	H0635: 2, H0581: 1 and	H0521: 1.	H0581: 2	S0278: 8, S0344: 5, L0740: 3, H0250: 2, H0581: 2,
	Ser-1 to Asn-10.		Ala-1 to Leu-6.	Leu-6 to Gln-15.		Lys-46 to Glu-60.	His-5 to Arg-13,	Leu-18 to Leu-23.							:	Leu-1 to Pro-6,	Pro-13 to Glu-18,	Gly-51 to Gly-62,	Arg-71 to Tyr-79.	Asn-23 to His-35.			Ser-8 to Val-16,	Ser-43 to Cys-49.		Asn-36 to Arg-48, His-107 to Tyr-112.		Ser-35 to Arg-48,	Leu-79 to Asn-88.	Gly-12 to His-17.	Pro-21 to Ala-27, Ala-49 to Ala-56.
	16434	16435	16436	16437	16438	16439	16440					16441	16442	16443		16444		-		16445	16446	16447	16448		16449	16450	16451	16452		16453	16454
	2 - 166	2 - 97	28 - 240	224 - 403	2 - 154	2 - 184	506 - 709					70 - 168	263 - 463	119 - 472	!	43 - 279				3 - 149	156 - 341	288 - 413	6-179		188 - 370	1 - 369	113 - 361	74 - 415		52 - 288	52 - 399
	6682	6683	6684	9899	9899	2899	8899					6899	0699	1699		6695				6693	6694	6695	9699		2699	8699	6699	00/9		6701	6702
	670270	782682	731094	964384	750811	778009	852921					915064	868489	868490		850048			_	958173	973926	922832	926801		947915	907631	868427	873396		868426	941311
	HWADZ21	HWADZ84	HWAEA55	HWAEA60	HWAEB19	HWAEB94	HWAEC75					HWAEG01	HWAEK82	HWAEN20		HWAFD32				HWAFG08	HWAFR09	HWAFT03	HWAFW34		HWAFW39	HWAFX39	HWAFY24	HWAFZ13		HWAFZ82	HWAGC76

																	-		
H0457: 2, S0142: 2, L0774: 2, L0749: 2, S0116: 1, H0031: 1, H0063: 1, S0144: 1, S0002: 1, L0800: 1, L0744: 1, L0777: 1 and H0653: 1.	H0581: 1 and H0542: 1.	H0556: 1, H0581: 1 and L0776: 1.	H0250: 2 and H0581: 1.	H0581: 1 and H0543: 1.	H0581: 2	H0581: 2 and H0264: 1.	H0581: 1 and H0457: 1.	AR089: 1, AR061: 0	H0305: 1, H0581: 1, L0745:	I and L0747: 1.	H0457: 3, H0581: 1 and H0445: 1.	H0264: 2, H0556: 1, H0581: 1 and H0444: 1.	H0581: 2, H0224: 1 and	H0160: 1.	H0581: 1 and T0041: 1	H0581: 2 H0341: 1 H0521:	1, H0543: 1 and S0452: 1.	H0581: 2	H0580: 1 and H0521: 1.
	Pro-38 to Lys-44, Arg-64 to Glu-79, Pro-129 to Gly-139, Arg-145 to Pro-151, Pro-154 to Arg-159.	Lys-39 to Pro-47.	Pro-31 to Phe-36, Gln-39 to Gln-45.	Glu-30 to Leu-48, Cys-53 to Ser-60.			Gly-37 to Leu-42.	Ser-68 to Val-74,	Pro-87 to Arg-97,	Cys-153 to Trp-164, Arg-172 to Cys-178.	Gly-29 to Ser-35.		Pro-33 to Phe-41,	Phe-52 to Cys-58,	110 00 00 032.23.	Pro-52 to Ser-60.	Ala-92 to Gly-102.		Ile-2 to Asp-8,
	16455	16456	16457	16458	16459	16460	16461	16462			16463	16464	16465		16466	16467		16468	16469
	3 - 530	3 - 224	2 - 262	32 - 286	357 - 536	238 - 441	180 - 422	526 - 1140			390 - 662	127 - 369	70 - 378	<del></del>	1344 - 280	1 - 471		428 - 607	3 - 341
	6703	6704	6705	9029	2029	80/9	60/9	6710			6711	6712	6713		6714	6715		6716	6717
	965895	869383	926279	930876	838759	868403	842011	888685			929586	931001	868523		960646	299606		918215	715110
	HWAGD11	HWAGD58	HWAGE40	HWAGG79	HWAGJ49	HWAGK95	HWAGL53	HWAGM33			HWAGX37	HWAGY05	HWAGZ22		HWAH110	HWAHS94		HWAIE02	HWBAB43

		19q13.3 113900, 126340, 126391, 130410,	134790, 138570,	160900, 173850, 258501, 600040, 602225, 602225									51:																	
		H0580: 2, L0748: 1 and S0308: 1.			H0580: 1 and H0457: 1.	H0580: 2, S0002: 2 and	L0779: 2.				H0580: 1 and H0444: 1.		H0445: 2, H0580: 1, L0761:	1 and L0697: 1.	H0580: 2 and L0747: 2.	H0580: 1 and H0416: 1.	H0305: 2, H0580: 1 and	L0518: 1.	H0580: 1 and H0486: 1.	H0580: 2	H0580: 1 and H0264: 1.		H0580: 1 and H0264: 1.	H0402: 1 and H0580: 1.		H0580: 2			H0580: 1 and H0457: 1.	H0580: 1 and H0551: 1.
Asp-36 to Glu-44,	Arg-74 to Ala-80, Pro-100 to Gly-106.	Ser-1 to Thr-16, Lys-27 to Glu-32,	Ala-34 to Gly-40,	Ala-79 to Gly-88.	Met-36 to Tyr-44.	Pro-27 to Thr-32,	Pro-42 to Trp-48,	Asp-109 to Arg-115,	Phe-126 to Asp-136,	Thr-145 to Lys-151.	Glu-16 to Phe-23,	Leu-35 to Lys-42.			Ala-47 to Asp-52.	Ser-1 to Lys-6.	Asn-1 to His-10,	Ala-40 to Ile-45.	Gly-9 to Gly-21.	Asp-1 to Cys-6.	Arg-10 to Ser-15,	Lys-34 to Pro-41.	Leu-40 to Lys-45.	Gly-22 to Gly-40,	Pro-47 to Asn-54.	Gly-13 to Trp-18,	Ile-29 to Thr-35,	Ala-42 to Ala-52.		
		16470			16471	16472					16473		16474		16475	16476	16477		16478	16479	16480		16481	16482		16483			16484	16485
		2 - 388			932 - 657	5-995					77 - 217		767 - 925		2 - 187	427 - 561	321 - 575		1-117	282 - 467	246 - 413		120 - 371	365 - 571		32 - 250			107 - 361	3 - 230
		6718			6719	6720					6721		6722		6723	6724	6725		6726	6727	6728		6729	6730		6731			6732	6733
		582109			823086	959449					729329		868363		715963	788700	960197		935032	630220	707033		927809	775401		802655			851029	868359
		HWBAB69	,		HWBAC22	HWBAL44					HWBAN54		HWBAQ16		HWBAR44	HWBAR90	HWBAS92		HWBAX06	HWBAX39	HWBAZ51		HWBBA64	HWBBA83		HWBBB48			HWBBE01	HWBBF31

			8q24-qter																											
H0580: 2	H0580: 1 and H0128: 1.	L0748: 2, H0580: 1, L0171: 1, L0662: 1, S0052: 1 and H0522: 1.	S0116: 1 and H0580: 1.	H0580: 1, L0748: 1 and H0444: 1.	H0254: 1 and H0580: 1.	S0298: 1 and H0580: 1.	AR089: 28, AR061: 24	L0748: 2, H0580: 1 and	H0580: 1 and H0521: 1.	H0402: 1 and H0580: 1.	H0580: 2	H0543: 2 and H0580: 1.	H0402: 1, H0580: 1 and	L0055: 1.		H0580: 1 and H0271: 1.	L0766: 2, S0134: 1, H0580:	1, L0060: 1 and L0747: 1.	H0580: 1 and H0087: 1.	H0580: 1 and S0002: 1.	H0580: 2	H0580: 1 and H0179: 1.	H0580: 2	H0580: 2	H0580: 1 and H0318: 1.	H0580: 1 and H0090: 1.				
Met-1 to Glu-18.	Glu-38 to Lys-45.	Glu-57 to Glu-64.					Gly-1 to Ser-9.	,	Asn-30 to Gln-39.		Trp-2 to Asp-11.		Leu-10 to Ser-15,		Arg-72 to Cys-77.		Leu-33 to Ile-40.		Ser-10 to Pro-21.		Lys-47 to Ser-54.	Lys-1 to Leu-7.	His-1 to Lys-21.			Gly-1 to Ser-12,	Leu-19 to Arg-26,	Pro-40 to Arg-46,	Asp-52 to Asn-61,	Arg-65 to Lys-71, Lys-76 to Gly-84.
16486	16487	16488	16489	16490	16491	16492	16493		16494	16495	16496	16497	16498			16499	16500		16501	16502	16503	16504	16505	16506	16507	16508				
34 - 243	45 - 200	294 - 500	177 - 374	428 - 571	85 - 282	10 - 228	32 - 232		148 - 354	109 - 270	232 - 348	3 - 257	1 - 231			209 - 580	218 - 436		239 - 397	231 - 368	209 - 472	320 - 442	188 - 316	67 - 210	155 - 277	3 - 299			<del></del>	
6734	6735	6736	6737	6738	6739	6740	6741		6742	6743	6744	6745	6746			6747	6748		6749	6750	6751	6752	6753	6754	6755	9529				
669491	971547	723183	686259	718858	660971	656704	747723		663728	868346	682344	771349	599996			088098	916036		711633	168667	674236	712731	784189	744828	738552	707803				
HWBBI20	HWBBI54	HWBBL78	HWBBM28	HWBBO46	HWBBQ40	HWBBQ86	HWBBR65		HWBBR78	HWBBV03	HWBBV59	HWBBV83	HWBBW11			HWBBX08	HWBBY01		HWBBY74	HWBCA14	HWBCA22	HWBCA92	HWBCC85	HWBCC90	HWBCF85	HWBCG35				

										-										-										
: 1 and		635: 1.	581: 1.	: 1 and	1: 1	: 1 and		-	580: 1.		580: 1.	580: 1.	445: 1.	3, L0777:	F. 1,	, L0745:	759: 1.		1, L0662:	: 1,	, L0777: 1	1 and		1 and						52: 1.
H0305: 2, H0580: 1 and	H0580; 2	H0580: 1 and H0635: 1.	H0580: 1 and H0581: 1.	H0580: 1, H0581: 1 and L0529: 1.	AR089: 1, AR061:	H0580: 1, H0416: 1 and	H0521: 1.		S0114: 1 and H0580: 1.		H0186: 1 and H0580: 1	H0271: 2 and H0580: 1.	H0580: 1 and H0445: 1	L0731: 5, L0779: 3, L0777:	2, H0580: 1, S0344: 1	L0768: 1, L0751: 1, L0745:	1, L0747: 1 and L0759: 1	H0580: 3	H0580: 1, H0090: 1, L0662:	1, L0766: 1, L0776: 1	L0792: 1, L0740: 1, L0777: 1	H0580: 1 H0581: 1 and	H0271: 1.	H0521: 2, H0580: 1 and	H0522: 1.	H0580: 2		H0580; 2	H0580: 2	H0580: 1 and S0052: 1.
Pro-17 to Asn-31.	Pro-18 to Lys-41.		Arg-25 to Asn-32.	Tyr-45 to Lys-51.	Pro-14 to Met-22,	Lys-25 to Ile-31,	Ala-55 to His-65,	Thr-74 to Lys-81.	Pro-1 to Lys-12,	Pro-30 to Gln-35.	Asp-10 to Gly-18.	His-11 to Pro-19.		Lys-21 to Pro-44,	Ser-61 to Arg-67,	Asn-70 to His-75.		Ser-5 to Asn-10.	His-1 to Asp-20,	Pro-52 to Phe-57,	Gly-64 to Glu-75.				٠	Asp-11 to Leu-16,	Trp-35 to Leu-41, Arg-54 to Pro-60.		Thr-4 to Leu-29, Tvr-42 to Glv-48	
16509	16510	16511	16512	16513	16514				16515		16516	16517	16518	16519				16520	16521			16522		16523		16524		16525	16526	16527
13 - 177	267 - 106	141 - 347	63 - 326	195 - 377	9 - 251				148 - 513		545 - 727	176 - 382	302 - 541	283 - 636	•			142 - 282	3 - 476			301 - 513		741 - 1040		136 - 426		370 - 522	76 - 270	62 - 184
6757	6758	6229	09/9	6761	6762				6763		6764	6765	99/9	2929				8929	69/9			0229		6771		6772		6773	6774	6775
527679	868326	868325	715064	964233	943720				960025		765986	955858	925649	882592				731395	828318			724145		963498		697705		750586	771950	626659
HWBCG45	HWBCI65	HWBCN09	HWBCN55	HWBCQ10	НWВСQ29				HWBCS21		HWBCS66	HWBCU82	HWBCW04	HWBCW88				HWBCW90	HWBCY30			HWBDL50		HWBDM24		HWBDP31		HWBDR66	HWBDS89	HWBDT15

										177070, 177070,	182500, 218000,	227220, 243500,	600839, 601800																			
										15q15																						
H0580: 2	H0580: 2	S0116: 1 and H0580: 1.	H0580: 1 and H0271: 1.	H0580: 2	H0580: 2	H0580: 2 and H0179: 1.	H0580: 2 and L0740: 1.		H0580: 2	AR089: 1, AR061: 0	H0580: 2, L0663: 2, L0662:	1, L0657: 1, L0659: 1,	L0666: 1, L0438: 1, L0748: 1	and L0777: 1.	H0580: 1 and H0069: 1.	H0580: 2	H0580: 1, H0264: 1 and	H0625: 1.	H0580: 2, L0775: 2 and H0521: 2	U0500. 1 10501. 1 and	H0360: 1, E0321: 1 and H0445: 1.	H0580: 2		H0580: 2	H0580: 2		H0580: 2	H0580: 2	H0580: 2		H0580: 2	H0580: 2
					Asp-1 to Gly-6.		Asn-10 to Gln-15,	Glu-31 to Phe-37.	Gly-2 to Pro-12, Gly-48 to Met-54.	Leu-5 to His-12.									Asn-9 to Cys-14.			Tyr-1 to Lys-6,	Gly-20 to Trp-33.	Pro-13 to Gly-20.	Arg-8 to Arg-22,	Asp-28 to Lys-34.	Gln-15 to Glu-22.		Ser-17 to Gly-29,	Arg-35 to Ala-42.	Ser-4 to Lys-9.	
16528	16529	16530	16531	16532	16533	16534	16535		16536	16537		·			16538	16539	16540		16541	16547	10342	16543		16544	16545		16546	16547	16548		16549	16550
313 - 438	3 - 203	3 - 182	26 - 118	123 - 287	169 - 456	46 - 204	43 - 195		166 - 2	1 - 489					226 - 366	2 - 160	127 - 345		181 - 336	189 240	100 - 340	310 - 420		1 - 195	173 - 328	,	155 - 406	1 - 162	117 - 365		188 - 3	135 - 257
9219	6777	6778	6229	08/9	6781	6782	6783		6784	6785					98/9	2829	88/9		6829	0029	06/0	6791		6792	6793		6794	6795	9629		2629	8629
597259	950702	924913	968493	727617	735390	954600	716215		788574	682583		•			709497	719940	664699		923008	CL17358	2/+000	692692		625162	722921		708955	735701	773289		691611	754729
HWBDW71	HWBEA72	HWBEI17	HWBEI53	HWBEL53	HWBEL70	HWBEL85	HWBEV44		HWBEV94	HWBEX27					HWBEY38	HWBEZ47	HWBEZ69		HWBEZ90	HWDEZO	11W DE2.74	HWBFE76		HWBFG09	HWBFL35		HWBFL96	HWBFM58	HWBFM78		HWBFN30	HWBFY69

			176943, 176943, 176943,	176943, 258870,	263700, 601969, 601969, 602084																								·
			10q26																										
H0580: 2	H0580: 1 and H0522: 1.	H0580: 2	H0580: 1 and H0477: 1.			H0265: 1 and H0580: 1.	H0580: 1 and H0370: 1.	H0580: 2	H0580: 2	H0318: 3, S0134: 1, S0218: 1, H0657: 1 and L0758: 1.	H0657: 2, H0255: 1 and	H0318: 1.		H0657: 2, L0770: 1, L0774:	1, L0666: 1, L0439: 1 and	LU///: 1.	H0657: 2, L0532: 1 and L0666: 1.	H0657: 2, L0779: 2, L0766: 1 and L0655: 1.	H0657: 1, H0318: 1 and	H0445: 1.	H0657: 3 and H0521: 1.	H0657: 2	H0583: 1 and H0422: 1.	S0218: 1 and H0583: 1.		H0583: 2	H0583: 2 and S0052: 1.	H0318: 7, H0445: 7, L0748:	6, L0766: 4, H0657: 3, L0751: 3, H0423: 3, H0583:
	Thr-16 to Glu-21.	•						Ser-25 to Ser-30.			Val-7 to Leu-22,	Cys-26 to Met-34,	Gly-57 to Ser-63.	Gln-24 to Ile-30.			Pro-9 to Ile-14.		Lys-8 to Gly-19,	Gly-37 to Arg-45.	Val-42 to Leu-56.	Pro-17 to His-23.		Leu-22 to Gln-29,	Phe-31 to Ala-37.				Pro-39 to Phe-45, (Trp-86 to Ala-92.
16551	16552	16553	16554			16555	16556	16557	16558	16559	16560			16561			16562	16563	16564		16565	16566	16567	16568		16569	16570	16571	
1-111	1 - 84	2 - 124	102 - 302			17 - 220	23 - 178	55 - 276	105 - 266	1 - 213	113 - 301			3 - 128			122 - 436	157 - 426	151 - 285		39 - 503	44 - 247	62 - 325	349 - 552		229 - 336	67 - 180	299 - 625	
6229	0890	6801	6802			6803	6804	6805	6806	6807	8089			6089			6810	6811	6812		6813	6814	6815	6816		6817	6818	6819	
701904	958611	948714	924830			289659	915603	808939	691511	933736	922463			933697			961741	951811	968958		951819	961739	463413	731763		923797	664597	920280	
HWBFY88	HWBGB08	HWBGB47	HWBGD16			HWBGF15	HWBGI01	HWBGI13	HWBGI30	. HWWAZ06	HWWDI03			HWWEF06			HWWEN10	HWWEP56	HWWFA12		HWWFK07	HWWFU42	HYAAB66	HYAAC60		HYAAD03	HYAAD67	HYAAD95	

																													-				
		•																															
2, H0477: 2, L0761: 2, L0794: 2, L0758: 2, L0599:	2, S0114: 1, L0785: 1,	H0254: 1, H0402: 1, H0486:	1, H0575: 1, H0421: 1,	H0264: 1, H0059: 1, L0767:	1, L0768: 1 and L0655: 1.	H0583: 1, L0766: 1 and	H0522: 1.	H0583: 1 and H0318: 1.	H0583: 2	L0748: 2, S0114: 1 and	H0583: 1.	H0583: 1 and H0305: 1.	H0583: 1, H0521: 1, L0779:	1 and L0758: 1.	H0583: 1 and H0179: 1.	H0583: 2	H0583: 1 and S0002: 1.	H0583: 2	H0583: 1, S0002: 1, L0766:	1 and H0423: 1.	H0583: 1 and H0341: 1.		S0134: 1 and H0583: 1.				H0583: 1, L0539: 1 and	H0271: 1.		S0218: 1, H0583: 1 and	80216: 1.	H0583: 2	H0583: 2
						Ser-50 to Thr-58,	Thr-64 to Gly-72.	Asn-19 to Tyr-28.	Arg-44 to Cys-50.			His-2 to Trp-7, Glu-37 to Asn-43.	Ala-1 to Gly-6.			Gly-20 to Trp-33.			Ile-20 to Lys-25.		Arg-1 to Phe-18,	Pro-38 to Phe-43.	Ile-3 to Ala-11,	Arg-25 to Leu-32,	Ser-40 to Cys-47,	Leu-101 to Lys-111.	Ser-37 to His-43,	Val-45 to Trp-60,	Lys-106 to Ser-113.	His-1 to Glu-8,	Asp-14 to Cys-21.		
						16572		16573	16574	16575		16576	16577		16578	16579	16580	16581	16582		16583		16584				16585			16586		16587	16588
						136 - 396		99 - 224	47 - 241	141 - 61		233 - 3	1-414		137 - 283	2 - 181	242 - 412	2 - 223	252 - 536		1 - 312		42 - 413				2 - 424			125 - 430		23 - 190	3 - 140
						6820		6821	6822	6823		6824	6825		6826	6827	6828	6859	6830		6831		6832				6833			6834		6835	6836
						915050		681251	947242	674591		706512	744792		678728	697590	299000	662426	862585		926017		724047				890595			99998/		934878	662439
						HYAAF33		HYAAH26	HYAAH36	HYAAI55		HYAAI67	HYAAJ36		HYAAJ89	HYAAN31	HYAAO39	HYAAR17	HYAAR95		HYAAS08		HYAAT50				HYAAU42			HYAAU88		HYAAX05	HYAAX17

	103050, 103050,	124030, 124030, 138981, 182380, 188826, 190040, 190040, 190040	129490, 167415, 176947		
	: 22q13.1		2q12		∞
H0583: 2	H0556: 6, S0144: 5, H0255: 22q13.1	4, L0766: 4, L0757: 4, H0650: 3, S0278: 3, H0486: 3, S0344: 3, S0426: 3, L0655: 3, L0747: 3, L0749: 3, H0543: 3, S0134: 2, L0785: 2, H0069: 2, H0318: 2, H0179: 2, L0748: 2, L0756: 2, T0002: 1, H0583: 1, S0116: 1, H0402: 1, H0638: 1, S0358: 1, S0140: 1, H0025: 1, H0575: 1, H0581: 1, H0510: 1, H0277: 1, H0653: 1, L0542: 1, L0383: 1, L0378: 1, L0542: 1, L0383: 1, L0731: 1, H0445: 1, L0661: 1, H0422: 1 and H0677: 1,	L0754: 3, L0803: 2, L0517: 2q12 2, L0362: 2, H0583: 1, L0773: 1, L0662: 1, H0521: 1 and L0780: 1.	L0766: 2, L0747: 2, L0779: 2, L0777: 2, L0755: 2, H0583: 1, S0116: 1, L0800: 1, L0644: 1, L0626: 1, L0375: 1, L0776: 1, L0792: 1, L0663: 1, L0748: 1, L0758: 1, L0593: 1 and H0423: 1.	H0583: 1 and H0521: 1.
Gly-1 to Trp-13.		Ser-52 to Ala-60.		Phe-20 to Ser-29.	Ser-1 to Cys-14, Arg-20 to Lys-31, Leu-34 to Thr-46.
16589	16590		16591	16592	16593
2-217	110 - 412		302 - 448	288 - 545	3 - 170
6837	8838		6839	6840	6841
630213	766694		629229	799572	692653
HYAAX65	HYAAY36		HYABB23	HYABB40	HYABB96

										-																		
H0583: 2	H0583: 1 and H0063: 1	H0583: 3 and L0754: 1.	H0583: 2, L0764: 1 and L0439: 1.	H0583: 2	H0583: 1 and S0052: 1.					AR054: 47, AR051: 42,	AR050: 39, AR089: 1,	AR061: 1	H0583: 1 and H0656: 1.		H0521: 4, L0766: 3, H0583:	1, H0581: 1, H0522: 1 and	H0543: 1.	S0114: 1, L0002: 1 and	H0583: 1.	H0583: 1 and H0576: 1.	H0583: 1, S0002: 1 and L0748: 1.	H0583; 1 and H0423; 1.	H0583: 2				L0748: 4 and H0583: 1.	L0439: 2 and H0583: 1.
Tyr-1 to Thr-10, Thr-15 to Cys-21,	Glu-29 to 1rp-34. Asn-1 to Tvr-9.	Arg-11 to His-21, Tyr-46 to Gly-54.			Thr-12 to Thr-28,	Glu-30 to Ala-36,	Gly-40 to Arg-48, Ala-61 to Tm-75.	Arg-94 to Gln-101,	Inr-112 to Asp-11/.	His-1 to Gly-12,	His-33 to Gly-44,	Thr-124 to Gly-137,	Thr-153 to Thr-158,	Arg-188 to Gly-193.	His-1 to Trp-12,		Pro-50 to His-60, Asn-70 to Arg-76.			Ser-21 to Gly-26.	His-25 to Lys-32.	Ser-28 to Pro-33.	Gly-1 to His-10,	Pro-13 to Arg-21,	His-39 to Cys-53,	Ser-79 to Lys-92.	Gln-1 to Ser-6.	Pro-27 to Arg-38.
16594	16595	16596	16597	16598	16599					16600					16601			16602		16603	16604	16605	16606				16607	16608
3 - 179	92 - 202	94 - 315	447 - 635	3 - 146	2 - 418					26 - 637					121 - 588			231 - 512		149 - 277	122 - 292	299 - 523	3 - 284			,	214 - 375	275 - 565
6842	6843	6844	6845	6846	6847					6848					6849			6850		6851	6852	6853	6854				6855	6856
919212	924677	822985	697593	811950	678864					971448					956236			724923		674268	665720	929756	746317				727948	760102
HYABC02	HYABC58	HYABE67	HYABE85	HYABG22	HYABL55					HYABP53					HYABV14			HYACG89		HYACI15	HYACI18	HYACI64	HYACI95				HYACI53	HYACF71
													1												•			

Γ-	F	T	$\overline{}$								1	T		_														_		
				· · · · · · ·				<u>-</u>																						
H0583: 1 and L0517: 1.	H0583: 1	H0583: 1 and L0589: 1.	AR050: 136, AR054: 109,	AR051: 95, AR089: 1,	AR061: 1	L0805: 2, H0583: 1, L0764:	1, L0375: 1, L0776: 1,	L0740: 1, L0731: 1 and	L0759: 1.	H0583: 1 and L0439: 1.	H0583: 1 and L0749: 1.	AR089: 2, AR061: 1	L0748: 2 and H0583: 1.		H0583: 1 and L0748: 1.	L0754: 2 and H0583: 1.	H0583: 1, L0759: 1 and	L0589: 1.	H0583: 1	AR050: 73, AR054: 55,	AR051: 52	H0583: 1	L0439: 4, L0756: 2, L0594:	2, H0583: 1, L0766: 1,	L0438: 1, L0779: 1 and	L0758: 1.	AR054: 69, AR050: 62,	AR051: 57	H0583: 1 and L0745: 1.	H0583: 1, L0748: 1 and L0749: 1.
Gly-1 to Gly-7, Gln-36 to Leu-45.	Leu-10 to Tyr-28, Arg-39 to Lys-44.	Pro-24 to Ser-29, Ser-45 to Glu-50.	Lys-16 to Arg-21,	Ser-44 to Arg-52.							Ala-18 to Glu-26.	Gln-68 to Ser-78,	Thr-93 to Ser-101,	Pro-119 to Ala-130.			Ser-30 to Arg-39.		Val-13 to Gln-19, His-35 to Gly-42.		-		Met-15 to Asn-21,	Ser-36 to Ser-41.						Cys-1 to Arg-12.
16609	16610	16611	16612	_						16613	16614	16615			16616	16617	16618		16619	16620			16621				16622			16623
74 - 229	145 - 384	199 - 462	368 - 21							347 - 430	360 - 542	2 - 580			3 - 233	392 - 186	164 - 364		115 - 300	3 - 257			517 - 738				212 - 727			1 - 177
6857	6858	6889	0989							6861	6862	6863			6864	6865	9989		2989	8989			6989				0289			6871
966482	974495	923525	900008							734463	717479	956606			731420	929758	782838		973089	887395			868338				887044			765252
HYACE11	HYACD06	HYACC03	HYABB43							HYAAY57	HYAAV45	HYAAU65			HYAAT55	HYAAT39	HYAAN84		HYAAL49	HYAAL41			HYAAL19				HYAAK77			HYAAK74

								-														22q11.2-qter					
H0583: 1 and L0777: 1.	H0583: 1, L0748: 1 and	L0754: 1.	H0583: 1 and L0748: 1.	H0583: 1 and L0362: 1.	H0583: 1 and L0717: 1.	H0657: 1 and L0664: 1.	H0657: 1 and L0367: 1.	L0766: 2, H0657: 1 and L0749: 1.	H0580: 1, L0745: 1 and	H0580: 1 and L0750: 1	AD054. 2 AD050. 2	AR054: 2, AR050: 2, AR051: 1	H0580: 1	AR089: 82, AR061: 18	H0580: 1	H0580: 1 and L0748: 1.	H0580: 1 and L0742: 1.	H0580: 1 and L0766: 1.	H0580: 1 and L0523: 1.	L0439: 3 and H0580: 1.		L0749: 2, H0580: 1 and	L0747: 1.	H0580: 1, L0775: 1 and L0755: 1.	H0580: 1 and L0748: 1.	L0748: 2 and H0580: 1.	L0439: 2 and H0580: 1.
Glu-26 to Cys-31.	Arg-17 to Asn-23,	Ser-43 to Ile-48.		Glu-21 to Tyr-31, Lys-58 to Lys-64.	Ile-15 to Ser-20.	Gly-1 to Gly-29.	Ser-1 to Leu-8.	Ser-33 to Gly-43.			Ang 5 to Ang 14	A18-5 10 A18-14.		Trp-46 to Lys-51,	Pro-109 to Asn-123, Phe-156 to Gly-165.			Gln-26 to Ser-31, Pro-34 to Gln-40.		Ser-18 to Asn-23,	Thr-30 to Thr-41,	Pro-11 to Thr-20.		Ile-17 to Glu-37.	Phe-1 to Arg-13, Ser-21 to Gln-32.		Pro-64 to Ile-75,
16624	16625		16626	16627	16628	16629	16630	16631	16632	16633	16624	10034		16635		16636	16637	16638	16639	16640		16641		16642	16643	16644	16645
148 - 279	1 - 219		2 - 157	186 - 389	268 - 510	298 - 471	204 - 374	85 - 234	377 - 538	1 - 489	1 270	0/7-1		55 - 696		324 - 229	534 - 316	31 - 237	418 - 531	490 - 257		274 - 447		3 - 200	153 - 437	553 - 744	26 - 355
6872	6873		6874	6875	9289	2289	8289	6289	0889	6881	6883	7000		6883		6884	6885	9889	6887	8889		6889		6890	6891	6892	6893
923526	773433		61/2019	677010	841969	965434	965426	933690	779081	927284	800638	000000		862606		754328	099229	934820	835888	735774		743462		971872	779002	735769	728805
HYAAJ03	HYAAF78		HYAAD24	HYAAC24	HYAAB40	HWWEW11	HWWEL11	HWWEC06	HWBGG82	HWBGF04	HWRFV46	0+1.7G.WT		HWBEG18		HWBEF69	HWBEE25	HWBEA06	HWBDU71	HWBDU58		HWBDS59		HWBDS12	HWBDR82	HWBDQ58	HWBDL82

,																													
	H0580: 1, L0665: 1 and L0599: 1.	H0580: 1 and L0766: 1.	H0580: 1 and L0143: 1.	AR089: 4, AR061: 1	H0580: 1, L0809: 1 and	L0604: 1.					H0580: 1, L0766: 1 and L0748: 1.	H0580: 1 and L0439: 1.	L0619: 1 and H0580: 1.	AR051: 12, AR054: 7,	AR050: 3	H0580: 1				H0580: 1, L0740: 1 and L0599: 1.	L0004: 1, H0580: 1 and	L0606: 1.	H0580: 1 and L0756: 1.	AR054: 240, AR050: 238,	AR051: 165	H0580: 1	H0580: 1 and L0766: 1.	L0748: 3 and H0580: 1.	H0580: 1 and L0376: 1.
Glu-77 to Asp-88, Leu-101 to Gly-110.	Pro-15 to Gly-22.	Gly-7 to Ser-13, Pro-36 to Phe-46.	Glu-1 to Pro-11.	Cys-1 to Arg-6,	Asp-18 to Ser-30,	Cys-37 to Ser-42,	Arg-64 to Lys-69,	Arg-74 to Val-79,	Asp-109 to Asp-115,	Val-161 to Lys-166.		Arg-3 to Ser-17, Pro-33 to Ala-41.	Cys-3 to Ser-10.	Ser-8 to Gly-13,	Pro-33 to Ser-39,	Asn-96 to Gln-102.	Ser-8 to Gly-13,	Pro-33 to Ser-39,	ASII-90 to Lys-101.	Leu-9 to Met-17.	Pro-24 to Cys-42,	Arg-66 to Pro-71.	His-2 to Gly-8.	Leu-4 to Asp-15.			Tyr-17 to Cys-22.		
	16646	16647	16648	16649							16650	16651	16652	16653			19363			16654	16655		16656	16657			16658	16659	16660
	247 - 369	136 - 408	240 - 464	2 - 562							175 - 363	143 - 418	1 - 222	198 - 503			362 - 3			78 - 218	8 - 298		247 - 381	75 - 239			2 - 214	385 - 528	3 - 116
	6894	9689	9689	2689							8689	6689	0069	6901			9611			6902	6903		6904	6905			6906	6907	8069
	928926	721010	935028	909031	•						868342	669472	756856	637734			785151			726509	964237		760176	989/88			861613	785313	919423
	НWВDК08	HWBCV48	HWBCU06	HWBCS08							HWBCH41	HWBCD20	HWBCA08	HWBBY86						HWBBV52	HWBBU10		HWBBT71	HWBBR45			HWBBQ22	HWBBN86	HWBBM02

						2: [								***											*						
H0580: 1 and L0763: 1.	H0580: 1, L0369: 1 and	L0517: 1.	H0580: 1 and L0754: 1.	AR054: 7, AR051: 4,	AR050: 2	L0748: 2, H0580: 1, L0772:	1, L0771: 1, L0774: 1,	L0776: 1 and L0758: 1.	H0580: 1 and L0602: 1.	H0580: 1 and L0754: 1.	H0580: 1 and L0745: 1.	H0580: 1 and L0748: 1.	H0580: 1 and L0740: 1.			AR089: 3, AR061: 1	H0580: 1 and L0601: 1.	L0779: 2 and H0580: 1.		L0766: 2 and H0580: 1.	L0748: 2 and H0580: 1.	L0439: 3 and H0580: 1.	AR061: 2, AR089: 2 H0580: 1	L0439: 2 and H0580: 1.	H0580: 1, L0748: 1 and L0749: 1.	H0580: 1 and L0748: 1.	U0590. 1 and 1 0766. 1	nuseu: 1 and Lu/66: 1.	H0580: 1 and L0731: 1.	H0581: 1 and L0589: 1.	L0766: 3, L0748: 2, L0785:
	Asn-32 to Thr-39,	Gly-46 to Phe-56.		_	Leu-52 to Trp-66.				Arg-1 to Gly-8.	Gly-7 to Leu-12, Ser-60 to Cys-66.		Ser-18 to Thr-23.	Lys-15 to Ala-23,	Ala-26 to Leu-34,	Gly-46 to Cys-56.	Thr-1 to Ala-11,	Thr-24 to Arg-29.	Cys-5 to Gln-13,	Asn-24 to Arg-29.	Leu-39 to Thr-44.		Thr-12 to Gly-19.			Gln-9 to Asn-14.	Ser-27 to Arg-33,	1111-01 (U F10-0/.		Gln-6 to Asp-21.	Gly-3 to Cys-10, Leu-29 to His-34.	Cys-31 to Tyr-37,
16661	16662		16663	16664					16665	16666	16667	16668	16669			16670		16671		16672	16673	16674	16675	16676	16677	16678	16670	100/2	16680	16681	16682
204 - 428	50 - 217		3 - 257	150 - 365					1 - 276	126 - 521	1 - 426	1 - 186	51 - 302			3 - 470		102 - 311		202 - 402	195 - 368	277 - 140	1649 - 1440	227 - 469	3 - 269	329 - 550	108 278	0/7-001	1 - 135	69 - 371	550 - 185
6069	6910		6911	6912				-	6913	6914	6915	9169	6917			6918		6169		6920	6921	6922	6923	6924	6925	6926	7,09	1770	6928	6929	6930
868349	923691		740125	868358					675360	771958	780976	796126	690422			944080		919351		724135	709490	747731	975117	766073	661664	715111	625401	104020	919559	926759	953013
HWBBL57	HWBBL03		HWBBF60	HWBBE52					HWBBD23	HWBAX77	HWBAT83	HWBAS96	HWBAR29			HWBAQ71		HWBAQ02		HWBAO50	HWBA038	HWBAK65	HWBAJ13	HWBAH72	HWBAH16	HWBAF43	HWBAF00	CO TUCHIII	HWBAC02	HWAGV04	HWAGQ02

1, H0581: 1, L0763: 1,	1, L0806: 1, L0776: 1,	L0749: 1, L0779: 1, L0752: 1, L0758: 1 and L0599: 1.	H0581: 1 and L0800: 1.	L0766: 2 and H0581: 1.	H0581: 1 and L0766: 1.		H0581: 1 and L0655: 1.				AR089: 1, AR061: 1	H0581: 1		H0581: 1 and L0758: 1.	H0581: 1 and L0662: 1.	AR089: 4, AR061: 1	H0581: 1	L0751: 2, H0581: 1, L0794:	1 and L0752: 1.			H0581: 1	H0581: 1		AR051: 268, AR054: 153,	AR061: 9	H0581: 1	H0581: 1 and L0766: 1.	H0581: 1 and L0593: 1.
Lys-90 to Ser-99,	Gln-112 to Trp-121.		Pro-24 to Val-31.		Asp-7 to Asn-17,	Arg-40 to His-47, Pro-80 to Cys-91.	Ala-1 to Gly-10,	Arg-33 to Thr-39,	Asn-59 to Glv-66	Arg-73 to Ser-80.	Gly-7 to Asp-12,	Glu-31 to Ser-43,	Val-76 to Ser-86.	Asp-8 to Cys-15.		Ser-16 to Ile-22.		Gln-1 to Arg-11,	Pro-33 to Arg-41,	Thr-46 to Gly-52,	Arg-54 to Cys-75.	Gln-1 to Lys-8.	Ser-1 to Ile-7,	Phe-27 to Lys-44.	Arg-22 to Arg-36.			Glu-52 to Lys-58.	Asn-11 to His-19, Gly-31 to Val-37,
			16683	16684	16685		16686				16687			16688	16689	16690		16991				16692	16693		16694			- 1	16696
			1 - 489	733 - 930	1-315		70 - 417				121 - 420	-		98 - 217	3 - 131	110 - 358		290 - 544				496 - 257	121 - 519		1 - 474			102 - 275	2 - 793
			6931	6932	6933		6934				6935			6936	6937	6938		6639				6940	6941		6942			6943	6944
			958373	961339	868436		509696				949950			868452	963323	948858		066086				868460	874351		887166			838763	951965
	-	•	HWAG042	HWAFQ10	HWAFM60	:	HWAFG12				HWAFE87			HWAFD56	HWAFD10	HWAFA47		HWAFA05				HWAEZ81	HWAEZ19		HWAEU35	 		HWAER10	HWAEP25

	H0581: 1 and L0589: 1.	AR089: 6, AR061: 1 L0740: 2 and H0581: 1.	AR061: 0, AR089: 0 H0581: 1, L0803: 1, L0664: 1, L0439: 1 and L0751: 1.	L0759: 4, H0581: 1, L0055: 1, L0773: 1 and L0777: 1.	H0581: 1, L0748: 1 and L0754: 1.	H0581: 1, L0661: 1 and L0750: 1.	H0581: 1 and L0439: 1.	AR050: 65, AR054: 52, AR051: 41 H0581: 1	L0748: 2 and H0581: 1.	L0794: 2, L0665: 2, H0581: 1, L0438: 1, L0439: 1, L0749: 1, L0757: 1 and	L0758: 1. H0581: 1 and I 0596: 1	AR089: 6, AR061: 2 H0581: 1 and 1 0608: 1	H0581: 1 and L0731: 1.	H0581: 1 and L0745: 1.	H0581: 1 and L0748: 1.	H0581: 1, L0748: 1 and L0581: 1.	H0581: 1, L0748: 1 and
Thr-65 to Ser-74, Lys-177 to Thr-182, Glv187 to Asn-199	Asn-1 to Lys-6, Gly-18 to Glu-28, Ser-53 to Thr-58.	Gln-60 to Ala-68, Trp-132 to Ser-138, Lys-156 to Val-163.	Leu-32 to Pro-38, Leu-124 to Ala-135.		Lys-45 to Ser-53.	Ser-10 to Gln-18.		Gly-31 to Lys-43.				Glu-1 to Lys-31, Ser-56 to Arg-61			Pro-16 to Ile-23.		Gly-41 to Ser-46.
	16697	16698	16699	16700	16701	16702	16703	16704	16705	16706	16707	16708	16709	16710	16711	16712	16713
	357 - 578	2 - 553	3 - 716	824 - 630	222 - 380	188 - 391	209 - 373	2 - 265	314 - 427	83 - 349	3 - 326	190 - 552	391 - 552	80 - 208	205 - 414	383 - 538	177 - 350
	6945	6946	6947	6948	6949	0569	6951	6952	6953	6954	6955	9569	6957	8569	6969	0969	1969
	868494	931547	958115	868526	682458	713272	782685	891149	677594	665173	733002	756888	774914	729166	733013	718711	923374
	HWAEK27	HWAEG71	HWAEC08	HWADQ35	HWADO27	HWADN42	HWADM84	HWADI46	HWADE25	HWADD18	HWACZ56	HWACY70	HWACS69	HWACQ54	HWACJ56	HWACI46	HWACH03

		113900, 126340, 126391, 136391, 138570,	160900, 173850, 258501, 600040, 602225, 602225																								
		19q13.3																									
L0749: 1.	L0747: 3 and H0581: 1.	L0777: 2 and H0581: 1.		H0581: 1 and L0748: 1.	H0581: 1 and L0747: 1.	L0748: 2 and H0581: 1.	H0581: 1 and L0764: 1.	L0766: 2, H0581: 1 and 1.0746: 1	L0766: 2 and H0581: 1.	H0581: 1 and L0646: 1.	AR089: 8, AR061: 2	H0581: 1	LU///: 2 and HU581: 1.	H0581: 1 and L0598: 1.	H0581: 1	H0581: 1, L0805: 1, L0776:	1, L0791: 1, L0663: 1 and	L0439: 1.	H0581: 1 and L0748: 1.			AR050: 94, AR051: 77,	AR054: 68	L0758: 2, H0581: 1 and	L0779: 1.	H0581: 1 and L0731: 1.	H0581: 1 and L0741: 1.
	Pro-5 to Arg-19.					Lys-21 to Arg-27, Ala-29 to Ala-35.					Phe-13 to Ile-19.			Thr-32 to His-38, Thr-46 to Asn-55.	Arg-18 to Asn-26.	Pro-10 to Ser-22,	Gly-57 to Cys-62.		Gly-1 to Arg-14,	Leu-32 to Gly-37,	Pro-41 to Gly-46.	His-3 to Ile-9,	Leu-13 to Leu-20,	Ala-47 to Ser-54,	Asn-86 to Pro-93.	Asn-36 to Glu-42, Pro-53 to Asp-58.	
	16714	16715		16716	16717	16718	16719	16720	16721	16722	16723	10001	10/74	16725	16726	16727			16728			16729				16730	16731
	34 - 249	2 - 382		145 - 294	107 - 280	160 - 384	33 - 254	322 - 423	360 - 602	3-212	1 - 486	7007	4 - 20/	45 - 329	48 - 185	144 - 377			594 - 809			3 - 590				106 - 336	3 - 443
	6962	6963		6964	6965	9969	2969	8969	6969	0269	6971	0207	7/60	6973	6974	6975			9/69			2269				8269	6269
	691565	927387		751409	868535	669486	951277	919442	191959	929275	949088	775510	01007/	791452	973237	721442			779578			887772				691878	757035
	HWACD30	HWABY68		HWABV67	HWABV34	HWABP20	HWABP19	HWABP02	HWAB113	HWABH68	HWABG11	11117 A DD 6.2	HWABD32	HWAAY79	HWAAY51	HWAAX48			HWAAW65			HWAAQ76				HWAAM30	HWAAL70

					103050, 103050,	124030, 124030,	138981, 182380,	188826, 190040,	190040, 190040							131400, 147061, 1475755, 147575, 147575, 147575, 147575, 147575, 147575, 147575, 1475755, 147575, 1475	147575, 153455,	159000, 181460,	602089, 601596,									
					22q13.1	•										5q31.1												
H0581: 1 and L0748: 1.	H0581: 1 and L0759: 1.	H0581: 1, L0766: 1 and L0599: 1.	L0452: 1 and H0581: 1.		2, H0656: 1 and	L0617: 1.						L0748: 3 and H0656: 1.	H0656: 1 and L0163: 1.	L0523: 2 and H0650: 1.		H0650: 1 and L0758: 1.				H0650: 1 and L0142: 1.	H0650: 1	H0650: 1	H0116: 1		H0116: 1	H0116: 1	L0748: 1 and S0452: 1.	L0021: 1, L0779: 1 and S0452: 1.
Arg-18 to Phe-32.		Arg-1 to Phe-9, Arg-23 to Gly-31.	Ser-4 to Ala-12,	His-21 to Leu-27, Pro-30 to Glu-35.	Lys-6 to Met-14,	Lys-60 to Leu-65,	Asp-71 to Lys-76,	Arg-78 to Ser-88,	Pro-96 to His-101,	Ti 136, 11 111	Thr-138 to Ala-144, Aro-173 to Asn-180	Ser-6 to Pro-13.	Gly-11 to Ile-17, Gln-57 to Gly-64.	Arg-54 to Ser-61,	Pro- /9 to Ser-90.	Lys-2 to Ile-11, Asp-76 to Gly-83.							Arg-28 to Gly-36,	Pro-73 to Tyr-80.	His-45 to Tyr-50.			Leu-16 to Asn-31.
16732	16733	16734	16735		16736							16737	16738	16739		16740				16741	16742	16743	16744		16745	16746	16747	16748
117 - 383	2 - 226	105 - 248	181 - 429		2 - 658							403 - 687	594 - 121	189 - 578		21 - 569				316 - 465	1 - 120	1 - 330	19 - 285		126 - 338	112 - 258	93 - 311	167 - 66
0869	6981	6982	6983		6984							6985	9869	2869		8869				6869	0669	6991	6992		6993	6994	6995	9669
712141	751037	841973	935131		944903							969325	940813	922441	,	96/231				969331	926196	914512	501001		500999	575458	965061	926906
HWAAI41	HWAAF60	HWAAE31	HWAAB06		HUUDR34							HUUCS12	HUUCJ02	HUJDJ03		HUJDE05		•		HUJCN12	HUJBQ04	HUJBP01	HTYSK94		HTYSK65	HTYSK23	HTYND11	HTYNC04

		2.														12												
H0058: 1	H0556: 1 and L0367: 1.	L0749: 4, L0748: 2, L0777: 2, H0556: 1 and L0471: 1.	H0556: 1	H0556: 1, L0783: 1 and L0809: 1.	H0556: 1 and L0366: 1.	H0556: 1, L0748: 1 and L0780: 1.	H0556: 1, L0643: 1 and 1,0749: 1	H0556: 1 and L0749: 1.	H0556: 1 and L0766: 1.	H0556: 1 and L0805: 1.	H0556: 1 and L0748: 1.	H0556: 1 and L0745: 1.	H0556: 1 and L0748: 1.	AR089: 1, AR061: 0	H0556: 1 and L0752: 1.	H0556: 1 and L0761: 1.	L0362: 2 and H0556: 1.	H0556: 1 and L0766: 1.	L0749: 5, L0748: 3 and	H0556: 1.		TIOSEC. 1 1 1 0740. 1	110330. 1 allu L0/40. 1.	H0556: 1 and L0439: 1.	H0556: 1 and L0562: 1.	L0748: 2 and H0556: 1.	L0758: 2 and H0556: 1.	H0556: 1 and I 0506: 1
Ala-4 to Gly-13.	Gln-20 to Gln-26.		Lys-28 to Met-34, Glu-40 to IIe-45.		Pro-8 to Arg-19.	Pro-7 to Gly-17.	Val-20 to Ser-37, Asp-110 to Arg-125.	0	Leu-50 to Ile-55.					Pro-49 to Thr-55.			Ser-76 to Gly-82, Gly-89 to Thr-97.	Pro-42 to Arg-47.	Pro-20 to Ala-25,	Lys-53 to Arg-63,	Pro-80 to Gly-89,	oer-139 to Asp-130.						Ara-15 to Ser-72
16749	16750	16751	16752	16753	16754	16755	16756	16757	16758	16759	16760	16761	16762	16763		16764	16765	16766	16767			16760	10/00	10/09	16770	16771	16772	16773
424 - 185	267 - 461	266 - 463	168 - 416	174 - 413	1 - 183	2 - 205	1 - 447	1 - 231	192 - 425	311 - 445	132 - 458	416 - 664	380 - 592	55 - 273		30 - 395	147 - 527	354 - 677	48 - 557			200 503	CCC - COC	767 - 700	107 - 223	1 - 204	332 - 577	2-424
L669	8669	6669	7000	7001	7002	7003	7004	7005	900/	7007	7008	7009	7010	7011		7012	7013	7014	7015			7016	7017	/01/	7018	7019	7020	7021
537277	933377	957886	965536	926338	957919	918089	965084	952064	869147	952067	916162	922905	869249	869261		872368	869265	869299	926992			060200	062200	933046	915250	948611	869312	841875
HTYAA83	90ASXLH	HTXSH08	HTXSC11	HTXSA04	HTXRS08	HTXRA02	HTXQS11	HTXQ007	HTXQM71	HTXQM07	HTXPX72	HTXPV03	HTXOR95	HTX0015		HTX0012	HTXOK51	HTXNJ60	HTXNG04			LITVNE! 1	IT VALATI	HIVINAIS	HTXMZ01	HTXMU37	HTXMR30	HTXMI82

																			125852, 126452.	126452, 141900,	141900, 141900,	141900, 141900,	141900 142000	142000 142200	142250, 142270,	176730 176730	176730, 190020.	191290, 192500	192500 194071	194071, 204500,	600856, 601680,	602631, 602631		
																			11p15.5	•														
			H0556: 1 and L0748: 1.	L0766: 9, L0761: 8, L0779:	3, L0809: 2, L0752: 2,	H0556: 1, L0772: 1, L0794: 1	and L0745: 1.	H0556: 1 and L0748: 1.	H0556: 1 and L0794: 1.	H0556: 1			H0556: 1 and L0369: 1.		H0556: 1 and L0768: 1.	H0556: 1 and L0748: 1.	H0556: 1 and L0596: 1.	H0556: 1 and L0756: 1.	H0556: 1, L0743: 1 and	L0744: 1.												:	H0556: 1 and L0748: 1.	H0556: 1 and L0596: 1.
Ala-30 to Leu-37,	Pro-44 to Lys-51,	Leu-53 to Arg-65, Pro-123 to Trp-132.		Asp-1 to Gly-8,	Leu-14 to Ser-20.						Asp-13 to Phe-19,	Arg-46 to Leu-54.	Met-1 to Asn-8,	Gln-19 to Ser-24.	Lys-8 to Pro-19.	Lys-6 to Thr-11.	Gly-51 to Pro-65.	Ser-74 to Ile-80.	Leu-2 to Ser-14,	Ser-26 to Ala-34,	Pro-43 to Gly-49.												Ile-9 to Asn-18.	Gln-25 to Thr-30,
				16775				16776	16777	16778	19364		16779		16780	16781	16782	16783	16784														16785	16786
			127 - 399	1 - 1152				409 - 663	235 - 471	138 - 335	164 - 3		71 - 241		24 - 236	117 - 284	321 - 515	208 - 447	3 - 251						-								203 - 481	94 - 606
			7022	7023				7024	7025	7026	9612		7027		7028	7029	7030	7031	7032														7033	7034
			875290	958357				756630	963602	487401	494070		869345		869347	677101	796330	697838	919683								_						746471	870446
			HTXMC72	HTXLS08				HTXLN70	HTXL110	HTXKP30			HTXKN65		HTXKM37	HTXKM24	HTXKK96	HTXKK31	HTXKF02														HTXKC64	HTXJX77

								,							
	L0439: 3, H0556: 1 and L0747: 1.	L0747: 3, L0758: 2, H0556: 1 and L0515: 1.	L0748: 2, H0556: 1, L0637: 1 and L0749: 1.	H0556: 1 and L0755: 1.	AR054: 19, AR050: 2,	AR051: 1 H0556: 1 and L0592: 1.	H0556: 1 and L0591: 1.	AR054: 16, AR050: 10, AR051: 2 H0556: 1		H0556· 1	L0599: 2 and H0556: 1.	H0265: 1 and L0749: 1.	L0743: 3, L0744: 2 and H0265: 1.	H0265: 1 and L0750: 1.	H0265: 1
Ser-45 to Lys-54.	Lys-1 to Leu-6.	Arg-24 to Gly-32, Asp-48 to Ser-55, Pro-58 to Glu-64, Glu-69 to His-86.		Leu-7 to Gly-18, Trp-20 to Asn-29.		Asp-31 to Ser-36, Asp-44 to Gln-53.	Lys-1 to Arg-14, Thr-38 to Cys-50.		Gly-23 to Arg-29, Gly-33 to Ser-42, His-51 to Thr-56, Pro-67 to Ser-79, Ser-84 to Arg-91,	Pro-100 to Gly-106. Ser-6 to Thr-12	Ser-2 to Met-7, Pro-18 to Pro-25.	Pro-3 to Gln-8, Val-35 to Asp-40.		Arg-4 to Cys-16, Pro-18 to Pro-38, Asn-86 to Lys-92.	Gly-26 to Leu-31,
	16787	16788	16789	16790	16791		16792	16793	19365	16794	16795	16796	16797	16798	16799
	941 - 693	77 - 334	329 - 454	145 - 282	25 - 240		122 - 349	737 - 450	410 - 727	222 - 386	54 - 344	4 - 246	1 - 462	2 - 292	87 - 374
	7035	7036	7037	7038	7039		7040	7041	9613	7042	7043	7044	7045	7046	7047
	741746	663123	871594	773508	566290		423763	957757	972481	969292	699152	712566	783418	790276	537392
	HTXJR61	HTXJP17	HTXJO80	HTXJO78	HTXJN39		HTXJK20	HTXJC08		HTXJA76	HTXJA32	HTXGH41	HTXGE85	HTXFR89	HTXFN90

	H0265: 1			H0265: 1			H0265: 1	H0265: 1					H0265: 1 and L0748: 1.	H0265: 1	H0265: 1 and L0748: 1.	L0740: 2 and H0265: 1.	H0265: 1 and 1.0748: 1	H0265: 1 and L0596: 1.		L0748: 2 and H0265: 1.	H0265: 1 and L0749: 1.	H0265: 1 and L0750: 1.	AR054: 15, AR050: 4, AR051: 3 H0265: 1	L0809: 4, L0803: 2, L0777:	2, H0265: 1, L0774: 1,	L0651: 1, L0749: 1 and L0780: 1.				
Gln-35 to Gly-41.					Pro-7 to Asn-13,	Pro-19 to Tyr-26,	Arg-48 to Phe-55.	Lys-11 to Cys-21,	Thr-41 to Pro-47,	Arg-55 to Thr-60.		Trp-8 to Ala-13,	Gly-22 to Ser-28,	Met-38 to Pro-45.	Lys-7 to Gly-14,	His-16 to Asp-22.	Arg-6 to Ser-11, Val-36 to Ser-43.	Pro-28 to Gly-34.		Ser-8 to Trp-19,	UIR-12 tO 1 10-05.	Pro-2 to Ser-11.	Arg-36 to Ser-51.	Tyr-39 to Tyr-45.	Ser-58 to Ile-66.	Thr-13 to Thr-19.		Glu-1 to Asp-9,	Lys-29 to Lys-46.	
	16800	16801	16802	16803	16804			16805			16806	16807			99861		16808	16809	16810	11891	16812	16813		16814	16815	16816	16817	16818		
	82 - 285	96 - 308	42 - 305	37 - 207	28 - 240			17 - 217			79 - 210	543 - 379			133 - 321		370 - 558	132 - 392	1 - 342	120 - 368	260 - 132	2 - 301		155 - 424	810 - 1070	2 - 202	1 - 276	3 - 422		
	7048	7049	7050	7051	7052			7053			7054	7055			9614		7056	7057	7058	7059	0902	7061		7062	2002	7064	7065	990/		
	824543	745316	537391	537393	537397			537398			689833	796309			796314		934438	869406	780277	789161	796561	723401		733641	636269	772473	888612	724650		
	HTXFN73	HTXFN63	HTXFN53	HTXFN23	HTXFH43			HTXFH20			HTXFG29	HTXFF96					HTXFF93	HTXEY18	HTXEX83	HTXEE90	HTXEC96	HTXEA45		HTXDZ56	HTXDW32	HTXDJ77	HTXDD24	HTXCW50		

																													107280, 107280,	107400, 107400,	122500, 186960,	24,2200, 0010+1
																													14q32.1			
H0265: 1	H0265: 1		H0265: 1, L0769: 1, L0509: 1, L0439: 1, L0747: 1 and	L0755: 1.	H0265: 1 and L0748: 1.	H0265: 1 and L0754: 1.	H0576: 1	L0766: 1, H0576: 1 and	L0779: 1.	H0576: 1		L0803: 1 and H0576: 1.	L0748: 2, L0766: 1, H0576:	1 and L0779: 1.	H0576: 1			H0576: 1	H0576: 1	H0576: 1			H0576: 1	H0576: 1	L0766: 1, H0576: 1 and	L0754: 1.	L0748: 2 and H0576: 1.	L0763: 1 and H0576: 1.	L0761: 2, L0754: 2, L0766: 14q32.1	1, H0576: 1, L0779: 1,	L0780: 1 and L0755: 1.	
Glu-18 to Ala-24.	Val-1 to Ser-12, Glv-14 to Thr-22.	Arg-63 to Ala-71.			Lys-1 to Trp-8.	Tyr-13 to Phe-18.	Pro-30 to Pro-38.	Pro-51 to Gly-58.		Ala-6 to Met-16,	Pro-39 to Lys-45.				Lys-15 to Ser-20,	Glu-28 to Trp-36,	Lys-38 to Lys-49.	Ala-50 to Asn-63.		Ser-1 to Val-10,	Gln-20 to Ser-29,	Pro-54 to Cys-67.		Leu-7 to Leu-13, Pro-15 to Cys-20.	Trp-14 to Ser-25.	•		Asp-25 to Lys-30.	Pro-27 to Ser-36,	Gly-73 to Leu-80.		
16819	16820		16821		16822	16823	16824	16825		16826		16827	16828		16829			16830	16831	16832			16833	16834	16835		16836	16837	16838			
5 - 82	17 - 286		92 - 376		360 - 485	196 - 318	1 - 411	131 - 433		3 - 218		85 - 189	94 - 201		121 - 279			160 - 354	2 - 127	177 - 395			142 - 303	233 - 367	25 - 189		174 - 320	91 - 321	12 - 251			
2902	2002		6902		7070	7071	7072	7073		7074		7075	9/0/		7077			7078	7079	7080			7081	7082	7083	!	7084	7085	9802			
783262	529663		921906		796612	707050	839177	869478		741610		964195	725533		785318			718872	494833	686254			812689	659934	712142		703863	952841	708338			
HTXCS84	HTXBT88		HTXAW03		HTXAK96	HTXAJ34	HTWLI77	HTWLF58		HTWLD61		HTWLD10	HTWLC51		HTWKZ86			HTWKZ46	HTWKZ35	HTWKZ28			HTWKZ27	HTWKZ15	HTWKT41		HTWKF34	HTWKB07	HTWJY36			

																													122560, 214400,
																													8q13
AR061: 1, AR089: 1 H0576: 1		H0576: 1 and L0748: 1.		L0766: 1 and H0576: 1.					H0576: 1	AR054: 180 AR050: 146	AR051: 125, AR089: 10,	AR061: 4	H0436: 1	H0436: 1	H0436: 1		L0766: 1 and H0436: 1.	H0436: 1			H0436: 1	L0770: 1 and H0436: 1.	H0436: 1 and L0748: 1.	H0436: 1 and L0777: 1.	H0436: 1, L0748: 1 and	L0749: 1.	H0436: 1	L0748: 2 and H0436: 1.	H0436: 1 and L0740: 1.
Gly-3 to Cys-12, Lys-33 to Lys-41	Gly-3 to Cys-12, Lys-33 to Lys-41.	Glu-1 to Ser-9, Ser-30 to Ala-36	Gln-61 to Tyr-66.	Thr-12 to Trp-20,	Pro-29 to Arg-35,	Leu-31 to A1g-38,	Arg-100 to Arg-108,	Cys-120 to Arg-125, Pro-150 to Arg-163.	Leu-38 to Lys-43, Ser-57 to Cye-58					Leu-16 to Ser-29.	Gly-1 to Tyr-13,	Arg-26 to Lys-39.	Ser-43 to Tyr-49.	Leu-7 to Leu-14,	Pro-16 to Glu-23,	Thr-36 to Glu-51.	Val-14 to Leu-27.	Gly-38 to Glu-48.					Phe-13 to Glu-20.	Lys-21 to Lys-27, Arg-32 to Ser-37.	Met-50 to Glu-63,
16839	19367	16840		16841					16842	16843				16844	16845		16846	16847			16848	16849	16850	16851	16852		16853	16854	16855
85 - 207	85 - 207	45 - 323		916 - 1434					2 - 226	2 - 196				59 - 187	110 - 301		19 - 186	18 - 242			1 - 114	346 - 609	352 - 498	239 - 460	395 - 523		1-93	1 - 183	2 - 229
7087	9615	7088		7089					0602	7091				7092	7093		7094	7095			9602	7097	7098	7099	7100		7101	7102	7103
790185	846554	805706		911448					559919	586124				582285	786805		841983	760303			721587	869491	767251	761686	713667		800193	745010	864553
НТWЈН08		HTWJF89		HTWJF50					HTWJA79	HTWFQ19	,			HTWFM90	HTWFM89		HTWFM79	HTWFM71			HTWFM48	HTWFJ71	HTWFH75	HTWFH73	HTWFH42		HTWFG29	HTWFD63	HTWEY89

602476																									139330, 139360,	150250, 164500,	182280, 22/646,	600071 601164	601726 601267	601373
																									3p23-p21	<del></del>				
	L0745: 9 and H0436: 1.	H0436: 1 and L0756: 1.	H0436: 1 and L0601: 1.	L0745: 4, L0750: 2 and	H0436: 1.		H0436: 1	L0809: 1 and H0436: 1.	H0436: 1 and L0608: 1.	H0436: 1 and L0748: 1.	L0745: 2, H0436: 1 and L0780: 1.	H0436: 1	1	H0436: 1	H0436: 1 and L0758: 1.	L0766: 1 and H0436: 1.	L0517: 1 and H0436: 1.	H0436: 1 and L0748: 1.		H0436: 1 and L0439: 1.	H0436: 1	,	<del>,</del>		L0766: 5, H0436: 1 and	LU/40: 1.				
Ser-70 to Pro-76.			Val-1 to Thr-16.	Lys-1 to Glu-10,	Leu-15 to Leu-22,	Glu-35 to Asn-41.		Leu-23 to Gly-32.	Met-36 to Asn-43.	Gly-5 to His-13, Lys-22 to Glu-27.	Ser-24 to Trp-32.				Asn-22 to Asp-27, Leu-31 to Lys-36.	Thr-1 to Pro-9.		Gly-32 to Gly-38,	Gly-41 to Gln-53, His-58 to Phe-69.				Pro-37 to His-49,	Thr-56 to Lys-64.						
	16856	16857	16858	16859			16860	16861	16862	16863	16864	16865	19368	16866	16867	16868	16869	16870		16871	16872	19369	19370		16873					
	316 - 522	64 - 228	319 - 639	426 - 581			130 - 447	211 - 345	253 - 399	105 - 269	138 - 281	188 - 358	123 - 239	134 - 229	201 - 413	215 - 319	387 - 542	27 - 290		244 - 2	1053 - 769	344 - 189	299 - 517		483 - 650			•		
	7104	7105	7106	7107			7108	7109	7110	7111	7112	7113	9616	7114	7115	7116	7117	7118		7119	7120	9617	9618		7121					
	788859	765512	876853	767264			869526	935644	753086	713869	723047	844831	859421	875978	959591	935642	935646	729244		772117	594496	701754	813291		869549					
	HTWEO90	HTWEJ74	HTWEH76	HTWEC75			HTWDR91	HTWD006	HTWDK68	HTWDJ42	HTWDI49	HTWDE70		HTWCL86	HTWCJ08	HTWCG06	HTWCD06	HTWCB69		HTWBW72	HTWBV33				HTWBV03					

													•																	
												,																		
H0436: 1 and L0748: 1.	H0436: 1 and L0747: 1.	H0436: 1 and L0747: 1.	L0598: 1 and H0436: 1.	H0436: 1 and L0752: 1.	H0436: 1 and L0753: 1.	H0436: 1 and L0748: 1.	H0436: 1	•	H0187: 1 and L0748: 1.	L0605: 2 and H0187: 1.	L0758: 5, L0794: 4, L0803:	3, L0744: 2, L0756: 2,	L0435: 1, L0804: 1, L0806:	1, L0805: 1, L0776: 1,	L0809: 1, L0789: 1, H0187:	1, L0439: 1, L0751: 1,	L0779: 1 and L0591: 1.	L0759: 2, L0657: 1 and H0187: 1.	H0187: 1 and L0439: 1.	H0187: 1	H0187: 1	H0187: 1	H0187: 1	H0187: 1		H0187: 1		H0187: 1	H0187: 1	H0187: 1
Glu-6 to Lys-13, Thr-29 to Glu-39, Arg-48 to Gln-59.		Asn-6 to Ser-15.	Pro-12 to Gly-20.		Pro-1 to Gly-12.	Leu-61 to His-66.		Ala-49 to Glu-56.		Ser-59 to Glu-71.	Thr-1 to Lys-11.							His-21 to Pro-27.			Tyr-18 to Lys-31, Ser-50 to Arg-59.	Lys-15 to Ile-20.		Ser-1 to Asp-10,	Lys-36 to Glu-43.	Leu-7 to Leu-13,	Pro-15 to Cys-20, Pro-23 to Cys-28.			Val-3 to Thr-10,
16874	16875	16876	. 16877	16878	16879	16880	16881	19371	16882	16883	16884							16885	16886	16887	16888	16889	16890	16891		16892		16893	16894	16895
26 - 208	102 - 221	221 - 418	132 - 362	82 - 360	181 - 309	232 - 477	285 - 569	418 - 167	235 - 444	33 - 308	744 - 289							261 - 443	3 - 191	89 - 307	151 - 429	24 - 191	87 - 218	23 - 217		187 - 321	,	54 - 134	124 - 207	196 - 426
7122	7123	7124	7125	7126	7127	7128	7129	9619	7130	7131	7132	_						7133	7134	7135	7136	7137	7138	7139		7140		7141	7142	7143
742588	751752	959619	922175	683546	745194	783120	604245	824129	722141	518825	905/19					<del></del>		967845	725127	522346	533745	735153	522817	714291		524291		522796	522794	789271
HTWBT62	HTWBP67	HTWBL08	HTWBI04	HTWBF27	HTWBE63	HTWBD84	HTWBD61		HTWAM49	HTWAM48	HTWAM25							HTWAJ11	HTWAE31	HTWAB85	HTWAB65	HTWAB57	HTWAB46	HTWAB42		HTWAB32	:	HTWAB27	HTWAB18	HTWAA90

										,																	14q32.3-qter					
	H0187: 1	H0187: 1	H0187: 1	H0187: 1	H0187: 1	H0187: 1	H0185: 1, L0509: 1, L0607:	1 allu LU473. 1.	H0185: 1	H0185: 1	H0185: 1	H0185: 1	H0185: 1	L0740: 2 and H0185: 1.	H0185: 1	H0185: 1	H0185: 1	L0748: 2 and H0185: 1.	H0185: 1		H0185: 1	H0185: 1	H0185: 1	H0185: 1		H0087: 1	H0087: 1 and L0602: 1.		H0087: 1, L0438: 1, L0740:	1 and L0758: 1.	H0087: 1 and L0809: 1.	H0087: 1
Glu-31 to Leu-40.		Ser-20 to Leu-28.			Glu-39 to Thr-47.	Ser-17 to Lys-32.						Pro-33 to Ser-38.	Thr-4 to Asp-10.	Leu-5 to Phe-11.	Gly-39 to Ile-46.	Gln-15 to Cys-23.	Gln-15 to Phe-20.		Arg-6 to Leu-15,	Leu-23 to Gly-28.			Asp-1 to Glu-9, Gly-35 to Gly-42.	Ser-1 to Thr-9,	Glu-16 to Leu-22.	His-3 to Tyr-10,	Lys-27 to Ash-54.	Pro-10 to Ala-16.	Glu-18 to Lys-23,	Ser-36 to Arg-41.	Gln-3 to Thr-9.	Glu-24 to Arg-38,
	16896	16897	16898	16899	16900	16901	16902		16903	16904	16905	16906	16907	16908	16909	16910	16911	16912	16913		16914	16915	16916	16917		16918	16919	16920	16921		16922	16923
	214 - 405	2 - 85	281 - 439	77 - 337	48 - 287	46 - 276	237 - 404		1 - 267	196 - 360	3 - 134	151 - 318	74 - 226	216 - 317	3 - 203	38 - 115	95 - 187	168 - 452	165 - 371		2 - 343	57 - 173	229 - 384	178 - 2		129 - 233	224 - 370	3 - 236	20 - 142		1 - 297	3 - 245
	7144	7145	7146	7147	7148	7149	7150		7151	7152	7153	7154	7155	7156	7157	7158	7159	7160	7161		7162	7163	7164	7165		7166	7167	7168	7169		7170	7171
	869563	522603	522797	915276	425133	991/99	268896		522950	773978	522080	856955	522805	725949	256606	694535	522807	275308	575319		575312	616/96	960761	921277		276030	778008	709445	695999		975082	216077
	HTWAA79	HTWAA42	HTWAA32	HTWAA31	HTWAA22	HTWAA17	HTUAE10		HTUAA93	HTUAA79	HTUAA63	HTUAA59	HTUAA55	HTUAA51	HTUAA45	HTUAA42	HTUAA32	HTUAA25	HTUAA23		HTUAA21	HTUAA11	HTUAA06	HTUAA02		HTSHI55	HTSHC81	HTSHB38	HTSHB18		HTSGZ92	HTSGQ88

																								250100 250000	250100, 250800, 250800							
																								77212 21	22415.51							
	H0087: 1		\$1		L0748: 2 and H0087: 1.	H0087: 1 and L0753: 1.	L0747: 3, H0087: 1 and	L0731: 1.	H0087: 1, L0744: 1 and	L0731: 1.		H0087: 1	L0803: 3, H0087: 1, L0754:	1 and L0749: 1.	H0087: 1 and L0748: 1.	H0264: 1		H0264: 1	H0264: 1 and L0754: 1.	H0264: 1 and L0748: 1.	H0264: 1		H0264: 1	H0264: 1 and I 0749: 1	110204; 1 and L0746; 1.	H0264: 1, L0748: 1 and L0745: 1.	AR054: 35, AR050: 33,	AR051: 28	H0264: 1	L0748: 2 and H0264: 1.	H0264: 1 and L0749: 1.	H0264: 1 and L0747: 1.
Ala-69 to Arg-81.	Gly-1 to Glu-6,	Pro-15 to Pro-23,	Ser-29 to Glu-46,	Leu-48 to Asp-66.	Pro-21 to Lys-28.		Asp-64 to Ser-76,	Thr-78 to Ala-86.	Ala-1 to Pro-9,	Pro-45 to Pro-55,	Pro-63 to Cys-74, Pro-85 to Val-98.	Gln-16 to Phe-30.	Ser-53 to Phe-59.				Pro-7 to Pro-17.	Asn-1 to Ile-11.					Ser-9 to His-14,	Glu 30 to Acm 36	GIG-30 to Asp-30.	Ser-24 to Asp-31.				Asn-36 to His-48.		Thr-53 to Pro-58,
	16924				16925	16926	1.6927		16928			16929	16930		16931	16932	19372	16933	16934	16935	16936	19373	16937	16038	10230	16939	16940			16941	16942	16943
	1 - 282				199 - 420	336 - 539	1 - 267		2 - 412			20 - 253	85 - 264		156 - 350	2 - 316	472 - 768	2 - 199	185 - 304	2 - 187	506 - 315	66 - 260	327 - 662	208 - 408		1 - 258	28 - 219			156 - 341	252 - 407	1 - 384
	7172				7173	7174	7175		7176			7117	7178		7179	7180	9620	7181	7182	7183	7184	9621	7185	7186	0017	7187	7188			7189	7190	7191
	276078				728289	787027	793056		747003			524280	920963		836021	006698	869903	456941	740599	869925	795719	796022	866492	457041	FOICE	932423	586144			735004	584928	765840
	HTSGQ42				HTSGM53	HTSGL89	HTSFU94		HTSFF64			HTSEX79	HTSEW02		HTSAA20	HTOJZ05		HTOJV25	HTOJT60	HTOJN69	HTOJM95		HTOJL36	HTOTE70		HTOJB05	HTOIZ49			HTOIX57	HTOIQ30	HTOIL74

		_				<u></u>													-													
		H0264: 1	L0754: 2 and H0264: 1.	H0264: 1 and L0605: 1.	S0005: 1 and H0264: 1.	L0459: 1, H0264: 1, L0744:	1 and L0752: 1.	H0264: 1 and L0748: 1.	AR061: 4, AR089: 2	HU264: I and LU/54: 1.	H0264: 1, L0517: 1 and	L0596: 1.	AR051: 11, AR054: 1,	AR050: 1	H0264: 1	H0264: 1 and L0366: 1.	L0794: 2 and H0264: 1.			H0264: 1, L0748: 1 and L0749: 1.	H0264: 1	L0601: 2 and H0264: 1.			H0264: 1 and L0753: 1.		H0264·1	H0264: 1	H0264: 1	H0264: 1 and L0439: 1.	H0264: 1	H0264: 1
His-103 to Leu-109,	Gin-112 to Trp-126.	Gln-14 to Tyr-22.	Gln-1 to Arg-8.	Pro-11 to Gly-16.		Pro-1 to Arg-10.		Lys-1 to Lys-7.	Arg-44 to Gly-59.		Ser-10 to Glu-16,	Asp-28 to Pro-36.	Glu-1 to Ile-15.			Pro-64 to Thr-70.	Arg-13 to Gln-21,	Phe-25 to Ser-33,	Pro-85 to Lys-92.	Asn-42 to Lys-54.		Thr-4 to Cys-15,	Glu-31 to Arg-36,	Gln-68 to Trp-80, Ser-98 to Gln-105	Ser-10 to Pro-19,	Thr-23 to Arg-35,	13H-50 10 1 HB-01.		Ser-1 to Ser-7.		Asn-1 to Glu-14.	Ala-11 to Tyr-16,
		16944	16945	16946	16947	16948		16949	16950		16951		16952			16953	16954			16955	16956	16957			16958	_	16959	16960	16961	16962	16963	16964
		130 - 273	342 - 500	201 - 371	59 - 190	162 - 488		491 - 252	41 - 286		26 - 355		3 - 92			162 - 440	6-329			167 - 427	119 - 478	544 - 888			1 - 183		100 - 285	52 - 138	40 - 132	308 - 463	35 - 184	1 - 150
		7192	7193	7194	7195	7196		7197	7198		7199		7200			7201	7202			7203	7204	7205			7206		7207	7208	7209	7210	7211	7212
		557829	783212	753595	961168	959992		787088	844319		869950		537358			791459	924976			956264	659280	963216			964961		558488	529798	523533	790438	529614	960203
		HTOIK90	HTOIJ84	HTOIH68	HTOIH09	HTOIF08		HTOIA89	HTOIA82		HTOHZ59		HTOHX62			НТОНТ93	HTOHR03			HTOHN89	HTOHI14	HTOHH78			HTOHG68		HTOGU88	HTOGU78	HTOGU77	HTOGC91	HTOFV57	HTOFV08

	H0264: 1 and L0749: 1.	H0264: 1	H0264: 1 and L0599: 1.	H0264: 1		H0264: 1 and L0803: 1.	H0264: 1 and L0747: 1.	H0264: 1		H0264: 1 and L0766: 1.	H0264: 1		H0264: 1 and L0755: 1.	H0264: 1 and L0601: 1.	H0264: 1 and L0754: 1.	1 0777. 2 and H0264. 1	//: 2 and f10204: 1.			H0272: 1	H0272: 1	H0272: 1	H0272: 1	H0272: 1	H0272: 1 and L0748: 1.	72: 1	H0272: 1	L0439: 2, H0272: 1 and
Lys-43 to Pro-50.	Glu-9 to Tyr-16. H02	Pro-15 to Leu-20. H02	OH   H02	Pro-1 to Trp-13. H02	Asn-25 to Leu-34.	H02			Thr-31 to Gly-36.		H02		Leu-12 to Phe-18. H02	Ser-4 to Glu-14, H02				Glu-104 to Ile-110,	FT0-121 to Lys-12/.		Arg-12 to Tyr-19, H02 Tyr-27 to Thr-33, Asn-62 to Ser-71.		H02	Phe-21 to Lys-33. H02		Ile-1 to Asn-6, H0272: 1 Gly-10 to Lys-29.		L0439: L0766: 1
	16965	16966	16967	16968	19374	16969	16970	16971	19375	16972	16973	19376	16974	16975	16976	16077				16978	16979	16980	18691	16982	16983	16984	16985	16986
	77 - 196	1 - 60	46 - 174	1179 - 1376	980 - 1156	84 - 266	280 - 513	268 - 38	581 - 408	323 - 445	83 - 259	306 - 530	2 - 400	1 - 282	287 - 400	56-436	000			1 - 201	103 - 351	2 - 298	2 - 124	20 - 148	281 - 469	2 - 190	1 - 159	295 - 525
	7213	7214	7215	7216	9622	7217	7218	7219	9623	7220	7221	9624	7222	7223	7224	7225	(77)			7226	7227	7228	7229	7230	7231	7232	7233	7234
	732454	527938	765918	911756	911956	960546	936543	509938	534071	742164	685375	886698	960113	968395	738532	698400	2010			521944	870004	529958	925368	732469	742315	530283	870011	965151
	HTOFU55	HTOFT20	HTOFS74	HTOF018		HTOFC06	HTOEX28	HTOEV91		HTOET61	HTOEE28		HTODM08	HTODL10	HTODD59	HTODA31	Current			HTOCK85	HTOCK73	HTOCK14	HTOCK03	HTOCA55	HTOBE60	HTOBC63	HTOBC26	HTOBA33

H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1	H0264: 1				H0264: 1	H0264: 1 and L0748: 1.	H0264: 1 and L0754: 1.	H0264: 1 and L0758: 1.	H0264: 1 and L0748: 1.	H0264: 1 and L0581: 1.	H0264: 1	H0264: 1	H0264: 1	H0264: 1 and L0608: 1.	H0264: 1 and L0599: 1.	H0488: 1 and L0439: 1.	L0731: 2 and H0488: 1.	H0488: 1 and L0766: 1.			H0488: 1	H0488: 1 and L0766: 1.	H0488: 1	H0488: 1 and L0766: 1.
		Arg-1 to Gln-16.		Ser-1 to Trp-6.	Glu-20 to Arg-27.			Asn-1 to Thr-15.	Lys-7 to Gly-15.	Phe-5 to Ala-10,	Glu-12 to Asn-17,	Val-21 to Asp-35,	Ile-58 to Asp-64.		Arg-1 to Ile-9.		Ser-3 to Thr-11.	Ser-20 to Thr-27.	Pro-83 to Ser-89.						Leu-29 to Lys-36.	Ala-1 to Thr-7.	Ser-5 to Asp-11,	Arg-18 to Asn-27,	Pro-33 to Glu-39, Ser-44 to Tro-50.		Ser-1 to Ala-7.		Phe-11 to Thr-21,
16987	16988	16989	16990	16691	16992	16993	16994	16995	16996	16997				16998	16999	17000	17001	17002	17003	17004	17005	17006	17007	17008	17009	17010	17011			17012	17013	17014	17015
268 - 411	1 - 231	11 - 187	62 - 208	122 - 292	19 - 126	3 - 176	52 - 135	2 - 100	180 - 326	101 - 295				2 - 241	440 - 634	1 - 165	23 - 181	2 - 118	109 - 435	44 - 193	1 - 105	61 - 261	261 - 94	89 - 217	1 - 465	195 - 311	232 - 582			2 - 181	268 - 408	98 - 223	1 - 261
7235	7236	7237	7238	7239	7240	7241	7242	7243	7244	7245				7246	7247	7248	7249	7250	7251	7252	7253	7254	7255	7256	7257	7258	7259			7260	7261	7262	7263
530183	530185	530187	530188	523754	870017	723595	529840	521914	530191	682115				960581	745545	921744	960122	783261	709579	529553	529556	529557	932732	764707	795376	771995	966217		······································	973076	870312	974496	759890
HTOAT88	HTOAT81	HTOAT68	HTOAT66	HTOAT63	HTOAT57	HTOAT50	HTOAT43	HTOAT35	HTOAT28	HTOAT27				HTOAT06	HTOA063	HTOA001	HTOAM08	HTOAL84	HTOAK39	HTOAI51	HTOAI25	HTOAI15	HTOAD05	HTOAA73	HTJNX95	HTJNT65	HTJNF11			HTJMZ89	HTJMU86	НТЈМО90	HTJML71

						-																								
	H0488: 1 and L0740: 1.	H0487: 1	H0487: 1 and L0748: 1.	H0063: 1 and L0748: 1.	H0063: 1, L0748: 1 and	L0749: 1.	H0063: 1	H0063: 1 and L0769: 1.		H0063: 1	L0759: 2 and H0063: 1.	H0063: 1	H0063: 1		H0063: 1 and L0764: 1.	H0063: 1	H0063: 1		H0063: 1	H0063; 1	H0063: 1, L0657: 1 and	L0592: 1.					H0063: 1	AR061: 12, AR089: 9	H0063: 1	H0063: 1
Leu-67 to Ser-75.	Ala-22 to Tyr-28.	Thr-13 to Lys-18.			Pro-27 to Ser-33,	Ser-39 to Pro-44.		His-16 to Phe-28,	Arg-3 / to Lys-43.		Asp-1 to His-6.	Ala-49 to Asn-54.	Ser-5 to Asp-11.		Gln-13 to Glu-21.	Pro-28 to Cys-39.	Gln-7 to Arg-15,	Ser-22 to Cys-29.		Thr-14 to Gly-22, Ser-40 to Glu-45.	Arg-14 to Thr-27,	Leu-36 to Gly-42,	Arg-51 to Cys-73, Glu-82 to Arg-92.	Gln-31 to Trp-36,	Arg-61 to Lys-80, Pro-93 to Thr-100	Thr-19 to Gly-24.			Cys-92 to Gly-98, Ala-101 to Trp-106.	His-40 to Asn-47.
	17016	17017	17018	17019	17020		17021	17022		17023	17024	17025	17026	19377	17027	17028	17029		17030	17031	17032			19378		19379	17033	17034		17035
	257 - 481	177 - 404	149 - 298	3 - 230	150 - 344		36 - 302	88 - 228		3 - 314	170 - 457	381 - 175	279 - 413	456 - 304	327 - 533	137 - 343	3 - 224		177 - 323	1 - 159	276 - 1			1 - 489		219 - 539	1 - 87	1 - 360		134 - 283
	7264	7265	7266	7267	7268		7269	7270		7271	7272	7273	7274	9625	7275	7276	7277		7278	7279	7280			9626		9627	7281	7282		7283
	733444	773609	724438	753137	278830		932174	964906		578894	792443	490673	516372	826819	953604	973309	578861		578758	722029	694051			870359		870365	578839	946168		519640
	HTJMF56	HTJAE78	HTJAD50	HTHDS68	HTHDR27		НТНДО05	HTHDM10	OC LCITALITY	HIHDL30	HTHDJ93	HTHDF13	HTHDE83		HTHDC07	HTHCV69	HTHCU42		HTHC072	HTHCO45	HTHCK89						HTHCG74	HTHBY73		HTHBW81

					118485, 231680,	272800, 272800,	272800, 276700, 602685																								
					15q24-q25	•																									
	H0063: 1 and L0754: 1.	L0439: 3 and H0063: 1.		H0063: 1 and L0748: 1.	H0063: 1 and L0439: 1.			H0063: 1 and L0777: 1.	H0063: 1		H0063: 1	H0063: 1			L0803: 2, L0750: 2, H0063:	1, L0763: 1, L0772: 1 and	L0789: 1.	H0063: 1		H0063: 1	H0063: 1 and L0764: 1.	H0062: 1	•	S0218: 1 and L0754: 1.	S0218: 1 and L0748: 1.	S0218: 1 and L0367: 1.	S0218: 1		S0218: 1	S0218: 1 and L0777: 1.	S0218: 1
Glu-10 to Gln-15.	Ser-12 to Lys-20,	Phe-20 to Ser-26,	Pro-47 to Thr-55.	Asn-15 to Gln-27, Ser-41 to Gly-47.	Gly-1 to Arg-7.			Tyr-21 to Ser-33.	Arg-15 to Leu-20,	Gly-24 to Arg-31.		Gly-1 to Arg-9,	Gln-15 to Gly-26,	GIN-29 to Phe-35.	Thr-7 to Arg-19,	Lys-60 to Leu-68,	Val-107 to Glu-119.	Ile-1 to Cys-8,	Ser-11 to Leu-22, His-25 to Glu-33.	Ser-9 to Ser-15.		Ser-49 to Asp-54,	Lys-56 to Asp-71.	Val-2 to Arg-11.	Phe-1 to Asp-7.		Ala-1 to Ala-7,	His-20 to Gly-38.	Leu-7 to His-12.	Gly-7 to Ser-12.	Pro-59 to Trp-67.
19380	17036	17037		17038	17039			17040	17041		17042	17043			17044			17045		17046	17047	17048		17049	17050	17051	17052		17053	17054	17055
485 - 147	318 - 563	294 - 554		146 - 310	1 - 483			58 - 201	181 - 273		46 - 240	2 - 148			119 - 589			3 - 182		323 - 213	123 - 16	3 - 239		3 - 185	249 - 428	47 - 238	1 - 141		35 - 145	3 - 131	2 - 202
9628	7284	7285		7286	7287			7288	7289		7290	7291			7292			7293		7294	7295	7296		7297	7298	7299	7300	j	7301	7302	7303
625209	746955	961627		458387	790305			739707	573926		526705	925600			699557			410319		954440	933029	575493		682376	760059	870386	731360		928205	756534	786057
	HTHBW64	HTHBU25		HTHBT36	HTHBM85			HTHBM60	HTHBK64		HTHBK47	HTHBK04			HTHBH32			HTHBG23	1	HTHBC07	HTHBC04	HTHAA24		HTGG027	HTGGN71	HTGGN51	HTGFY55			HTGFK70	HTGEY89

													154275, 162200,	162200, 182138,	239100, 600881,	001224, 002402																
													17q11.2																			
S0218: 1	AR089: 43, AR061: 9	S0218: 1 and L0623: 1.				S0218: 1 and L0605: 1.		S0218: 1 and L0599: 1.	S0218: 1 and L0748: 1.	L0766: 3, S0218: 1, L0789:	1 and L0748: 1.	S0218: 1 and L0748: 1.	S0218: 1 and L0758: 1.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L0749: 1, 50154: 1 and L0749: 1.	S0134: 1 and L0517: 1.	S0134: 1, L0766: 1 and	L0749: 1.	L0747: 2, S0134: 1, L0439:	1, L0749: 1 and L0756: 1.	L0748: 2 and S0134: 1.	S0134: 1	L0748: 2 and S0134: 1.	S0134: 1	S0134: 1	S0134: 1 and L0756: 1.	S0134: 1	S0134: 1 and L0756: 1.	L0748: 2 and S0134: 1.	
	Arg-3 to Ser-9,	Arg-11 to Trp-30,	Thr-38 to 1yr-49,	Thr-101 to Arg-107,	Gly-139 to Tyr-146, Tyr-215 to Lys-223	Glu-1 to Arg-10,	Ser-26 to Gly-39.	Asp-48 to Phe-55.		Ser-68 to Gly-85.		Ser-32 to Lys-42.	Pro-21 to Gly-31.					Ser-8 to Arg-14,			Asn-13 to Leu-18,	Pro-68 to Ser-73.	Thr-46 to Ser-55.				Glu-14 to Ala-19.				Leu-10 to His-15,	Gly-31 to Glu-36, Glu-53 to Gly-65.
17056	17057					17058		17059	17060	17061		17062	17063			17071	1/004	17065	17066		17067	ļ	17068	17069	17070	17071	17072	17073	17074	17075	17076	
76 - 246	301 - 1017					135 - 317		258 - 425	28 - 228	254 - 508		119 - 244	3 - 122			771 70		86 - 316	297 - 515		104 - 364		3 - 392	382 - 134	523 - 678	238 - 399	1 - 120	155 - 286	66 - 167	3 - 200	565 - 810	_
7304	7305					7306		7307	7308	7309		7310	7311			17.10	716/	7313	7314		7315		7316	7317	7318	7319	7320	7321	7322	7323	7324	
711117	963862					923445		721660	786665	695799		656504	909806			700007	//000/	963854	741381		290962		784676	895628	732247	578786	870405	739388	578782	576472	669656	
HTGEY40	HTGEX10					HTGEX03		HTGEU48	HTGEG89	HTGEG17		HTGED13	HTGEA37			TYTOTAL	111 dDA3/	HTGDX10	HTGDV61		HTGDV52		HTGCQ86	HTGCH60	HTGCD55	HTGBS94	HTGBS70	HTGBS59	HTGBS51	HTGBS34	HTGBS08	

103850, 114835, 121360, 217800,	218030																														
16q22																															
L0754: 2 and S0134: 1.	G0124. 1 2 1 TO420 4	50134: 1 and L0439: 1.	T 0500: 3 - 4 50134 1	EU396: 2 and 50134: 1.	S0134: 1	S0134: 1	S0134: 1	S0134: 1 and L0748: 1.	S0134: 1 and L0748: 1.	L0367: 2, S0134: 1, L0370:	1, L0652: 1, L0748: 1 and	L0605: 1.	S0134: 1 and L0756: 1.	S0134: 1 and 1 0766: 1	S0134: 1 and L0766: 1	1 0740: 3 223 20134 1	LU/49: 2 and SUI34: 1.	S0134: 1 and I 0748: 1	S0134: 1 and I 0766: 1	20124: 1 and LV/00: 1.	S0134: 1, L0756: 1 and L0759: 1.	S0134: 1 and L0581: 1.			S0134: 1 and L0766: 1	S0134: 1 and L0749: 1.	S0134: 1 and L0748: 1.		S0134: 1, L0748: 1 and L0756: 1.	S0134: 1 and L0749: 1	S0134: 1 and L0748: 1.
Phe-20 to Ser-25.			Gin 20 to Are 40	Olu-29 10 Alg-40.		Lys-1 to Lys-7.	Pro-54 to Pro-59.						Asn-18 to Cys-24, Arg-57 to Pro-70.	Leu-43 to Thr-48.		Dro. 22 to Dro. 22	Arg-46 to Trp-51.	· · · · · · · · · · · · · · · · · · ·		T 11 4- 0 10	Lys-11 to Cys-18.	Trp-49 to Ala-54,	His-62 to Asp-71,	Gln-88 to Ser-96.	Pro-31 to Gln-36.	Leu-15 to Arg-24.	Arg-26 to Glu-31,	Ciy-51 to Out-55.	Leu-6 to Gly-11.		Asn-29 to Lys-37.
17077	17078	17070	17080	17001	1/081	17082	17083	17084	17085	17086			17087	17088	17089	17000	060/1	17091	17092	17002	1/093	17094			17095	17096	17097	0000	1/098	17099	17100
230 - 391	114 - 233	275 - 518	7-176	021 - /	877 - CC	27 - 185	127 - 375	96 - 239	342 - 479	31 - 252			1 - 210	199 - 417	503 - 297	162 - 446	0++ - 701	141 - 356	67 - 372		14 - 423	22 - 309			3 - 173	3 - 113	194 - 430		349 - 018	214 - 462	178 - 387
7325	7326	7377	7328	7220	6757	7330	7331	7332	7333	7334			7335	7336	7337	7338		7339	7340	7341	7.41	7342			7343	7344	7345	77.75	/340	7347	7348
727276	738229	660483	625756	751575	C7CIC/	278807	932168	785594	766583	683556			781275	773666	496307	732248		919524	870424	870423	C7±0/0	716740			705634	785672	764598	706541	190041	870441	955227
HTGBR52	HTGBN58	HTGBL15	HTGBH09	HTGRE67	TTTODEO/	HIGBES9	HTGBE05	HTGAZ86	HTGAZ75	HTGAY27			HTGAX83	HTGAW78	HTGAT92	HTGAT55		HTGAT16	HTGAT01	HTGAS15	Ciguration	HTGAR44			HTGAK39	HTGAJ86	HTGAJ73	HTGA106	UCIVIOLITI	HTGAI15	HTGAI13

																		<del></del>												
S0134: 1 and L0731: 1.	AR051: 22, AR050: 19,	AR054: 17	30124. 1	L0608: 2 and S0134: 1.		S0134: 1, L0790: 1 and	L0740: 1.	S0134: 1	S0134: 1		L0361: 2, H0477: 1 and	L0601: 1.		H0477: 1 and L0803: 1.	H0075: 1 and L0589: 1.		· .		H0075: 1	H0635: 1, L0772: 1 and	L0662: 1.	H0635: 1 and L0748: 1.	H0635: 1	H0635: 1 and L0070: 1.	L0455: 2 and H0635: 1.	AR061: 4, AR089: 3 H0635: 1	H0635: 1	H0635: 1	H0635: 1 and L0748: 1.	AR050: 26, AR051: 23, AR054: 22 H0069: 1
	Gln-29 to Phe-35,	Pro-73 to Pro-79,	110-00 (0 110-22).	Ala-13 to Leu-23,	A14-50 to Asp-40.	Pro-23 to His-28,	Ser-65 to Arg-70.	Pro-10 to Gln-24.	Ser-2 to Glu-10,	Lys-18 to Gly-28.	His-1 to Trp-6,	Arg-36 to Gly-67,	Pro-73 to Gln-82.	Gly-10 to Ser-17.	Gln-1 to Met-6,	Pro-9 to Asp-14,	Glu-36 to Trp-45,	Arg-47 to Glu-58.	His-1 to Ala-8.	Pro-5 to Arg-10,	Gly-71 to Arg-76.		Arg-23 to Trp-48.	Ser-35 to Ile-41.			Glu-1 to Arg-7, His-87 to Gln-95.		His-16 to Trp-25, Asp-55 to Gly-63.	
17101	17102		,	17103		17104		17105	17106		17107			17108	17109				17110	17111		17112	17113	17114	17115	17116	17117	17118	17119	17120
1 - 126	204 - 554		000	223 - 372		2 - 220		119 - 277	42 - 266		6-311			339 - 659	3 - 224				160 - 420	438 - 79		237 - 88	202 - 411	147 - 359	288 - 452	179 - 457	3 - 461	65 - 277	249 - 569	113 - 418
7349	7350		1000	7351		7352		7353	7354		7355			7356	7357				7358	7359		7360	7361	7362	7363	7364	7365	7366	7367	7368
754052	567432		02000	932378		064513		574099	574114		765656			870746	954434				785846	969518		880561	973870	930947	838701	910040	965738	918304	870855	790991
HTGAD62	HTGAD16		2001 00011	HIGADOS	L CELL	HIGACI/		HTGAA80	HTGAA44		HTDAC74			HTDAB18	HTBAB07				HTBAA86	HTAJP12		HTAJD72	HTAIY90	HTAIQ05	HTAIG58	HTAIF22	HTAIF11	HTAHZ02	HTAGB16	HTAFC92

																											104770, 107670, 110700, 135940,
		2q37.2																									1421
AR061: 6, AR089: 4 H0069: 1	H0069: 1, L0370: 1, L0776: 1 and L0758: 1.	H0069: 1	H0069: 1 and L0439: 1.	H0069: 1	H0069: 1	H0069: 1 and L0438: 1.	H0069: 1 and L0748: 1.	H0069: 1 and L0750: 1.	H0069: 1 and L0748: 1.	L0749: 2, H0069: 1 and	L0748: 1.	H0069: 1 and L0748: 1.	H0069: 1 and L0643: 1.	L0518: 4 and H0069: 1.		H0069: 1		110000 1 110740 4	H0069: 1 and L0/40: 1.	H0141: 1	L0439: 3 and H0223: 1.			-	H0222: 1		H0222: 1
Leu-7 to Lys-16, Thr-31 to Arg-41, Lys-54 to Asn-61, Ser-89 to His-104, Lys-126 to Lys-131.	Arg-41 to Glu-46, Glu-49 to Arg-59.	Gly-1 to Arg-7.	Thr-27 to Ser-40.		Trp-1 to Gly-7.		Pro-6 to Lys-17.	Ser-16 to Gly-22.	Ser-1 to Gly-15.					Ser-1 to Gly-9,	Pro-12 to Gly-25, Pro-27 to Glu-32.	Asn-6 to Ser-11,	Pro-28 to Trp-37,	Int-39 to Lys-50.	Fne-19 to Gm-24.	Pro-2 to Cys-18, Phe-22 to Gly-29.	Gln-1 to Ser-9,	Ser-43 to Glu-53,	Leu-84 to Phe-92,	Leu-96 to Ile-101.	Gln-16 to Ser-21,	Thr-48 to Lys-56.	Pro-27 to Ser-35, Pro-51 to Trp-58.
			17124	17125	17126	17127	17128	17129	17130	17131		17132	17133	17134		17135		17126	1/130	17137	17138				17139		17140
823 - 329	52 - 228	1 - 306	1 - 168	114 - 221	63 - 170	3 - 161	3 - 134	419 - 661	3 - 134	161 - 526		98 - 187	64 - 291	110 - 15		299 - 123		120 7	150-2	2 - 169	1 - 483	<del></del>			1 - 210		3 - 272
7369	7370	7371	7372	7373	7374	7375	7376	7377	7378	7379		7380	7381	7382		7383		7704	/304	7385	7386				7387		7388
959129	932459	82088	753597	425065	537376	968307	753598	932467	778852	720684		971524	972231	962096		518652		203203	170020	973773	752169				508061		589206
HTAEV23	HTAEP05	HTAEK41	HTAEF68	HTADW88	HTADW52	HTADO10	HTADB68	HTACX05	HTACW82	HTABK47		HTABE12	HTAA012	HTAAB06		HTAAA45		UTA A A 21	111777711	HI4AY23	HT3TA67				HT3SH28		HT3SA81

145001, 146790, 152445, 152445, 159001, 174000, 179755, 182860, 182860, 182860, 191315, 230800, 230800, 266200, 600897, 601105, 601412, 601652,																							
	H0222: 1	H0222: 1	H0222: 1	H0159: 1 and L0743: 1.	H0159: 1	H0221: 1	H0221: 1	H0220: 1		H0220: 1	L0748; 2 and H0220; 1.	H0220: 1	H0220: 1	H0220: 1	H0220: 1	H0220: 1 and L0439: 1.	H0220: 1		H0219: 1	L0731: 2, H0551: 1, L0747:	1 and LU/30: 1.	H0551: 1 and L0/45: 1.	H0551: 1 and L0740: 1.
	Gly-27 to Ala-33.	Gln-20 to Phe-26, Val-73 to Asn-91.	Asn-32 to Lys-43.		Val-27 to Ser-33.		Glu-38 to Ser-44.	Ser-9 to Ser-14,	Glu-30 to Ile-36, Tyr-38 to His-43.		Pro-1 to Asn-7, Gly-23 to Ile-28.	Gly-25 to His-31.				Lys-1 to Leu-11.	Glu-1 to Val-11,	Leu-34 to Tyr-44.		Pro-20 to Ser-25,	rue-47 to 11p-54.		Thr-11 to Arg-16.
	17141	17142	17143	17144	17145	17146	17147	17148		17149	17150	17151	17152	17153	17154	17155	17156	-	17157	17158	17150	601/1	17160
	134 - 349	54 - 326	233 - 418	1 - 273	80 - 181	77 - 160	20 - 193	101 - 265		37 - 171	180 - 326	52 - 273	110 - 247	21 - 155	2 - 97	403 - 272	124 - 336		114 - 251	115 - 282	722 276	235 - 370	1 - 522
	7389	7390	7391	7392	7393	7394	7395	7396		7397	7398	7399	7400	7401	7402	7403	7404		7405	7406	7407	740/	/408
	781631	766391	522757	766488	527782	522751	522754	524290		518341	522771	508077	578704	840184	695038	522770	870917		575355	949156	036055	55076	940661
	HT3SA80	HT3SA71	HT3SA56	HT3BK75	HT3BF33	HT2TA82	HT2TA37	HT2SA86		HT2SA63	HT2SA50	HT2SA48	HT2SA47	HT2SA38	HT2SA37	HT2SA26	HT2SA13		HT1TB40	09HQXSH	HCVC70A	1151C204	HSYCV01

										:																				
							<del></del>									19q														
H0551: 1 and L0542: 1.	H0551: 1 and L0752: 1.	H0551: 1 and L0601: 1.	H0551: 1 and L0740: 1.	H0551: 1, L0740: 1 and L0777: 1.	L0439: 2, H0551: 1 and	L0745: 1.				H0551: 1, L0747: 1 and	H0551: 1 and L0766: 1.	H0551: 1, L0779: 1, L0592:	1 and L0608: 1.	H0551: 1		S0298: 1 and L0740: 1.	S0298: 1 and L0759: 1.	S0298: 1 and L0756: 1.		L0770: 2, L0749: 2, S0298:	1, L0653: 1, L0776: 1,	L0659: 1 and L0789: 1.	S0114: 1 and L0754: 1.	S0114: 1 and L0745: 1.		S0114: 1 and L0754: 1.	S0114: 1 and L0756: 1.	L0748: 2 and S0114: 1.	L0754: 2 and S0114: 1.	AR089: 40, AR061: 7
		Arg-10 to Arg-20, Ala-35 to Gly-54.	Ile-1 to Asn-10.		Val-1 to Asp-6,	Val-10 to Asn-20,	Gly-33 to Asn-46,	Glu-57 to Ser-62,	Ala-69 to Gln-74, Asp-90 to Ser-100.	Pro-10 to Arg-16.				Leu-22 to Ala-28,	Lys-33 to Arg-44.	Ser-36 to Thr-42.		Pro-9 to Trp-16,	Pro-55 to Leu-61, Asn-70 to Glv-77.					Arg-15 to Ile-23,	Thr-33 to Phe-39.	Thr-8 to Trp-13.	Leu-9 to His-14.		Ile-16 to Gly-21.	
17161	17162	17163	17164	17165	17166					17167	17168	17169		17170		17171	17172	17173		17174			17175	17176		17177	17178	17179	17180	17181
247 - 134	2 - 388	1 - 210	245 - 532	59 - 541	89 - 475					2 - 571	85 - 408	1 - 216		134 - 3		2 - 421	374 - 610	9 - 239		166 - 363			170 - 298	283 - 510		15 - 284	326 - 517	239 - 337	274 - 396	120 - 467
7409	7410	7411	7412	7413	7414					7415	7416	7417		7418		7419	7420	7421		7422			7423	7424		7425	7426	7427	7428	7429
926943	725586	713630	731627	772067	756492					661807	928403	953032		493771		659891	917244	780932		715630			754362	780400		747422	746074	727757	726195	950023
HSYCS04	HSYBZ51	HSYBX42	HSYBW55	HSYBK77	HSYBH70					HSYBH16	HSYAV79	HSYAU07		HSYAF81		HSMBD15	HSMBC78	HSMBA83		HSMBA39			HSAZQ69	HSAZP83		HSAZP65	HSAZI64	HSAZI53	HSAZG52	HSAZG23

																				-									
L0523: 2, S0114: 1, L0748: 1 and L0749: 1.					S0114: 1	S0114: 1 and L0594: 1.	S0114: 1	S0114: 1 and L0748: 1.	S0114: 1 and L0530: 1.	S0114: 1 and L0748: 1.	S0114: 1 and L0754: 1.		L0749; 2 and S0114; 1.			S0114: 1 and L0748: 1.		S0114: 1			S0114: 1 and L0439: 1.	S0114: 1 and L0757: 1.	S0114: 1 and L0756: 1.	S0114: 1 and L0748: 1	S0114: 1 and L0756: 1.	L0742: 2 and S0114: 1.	S0114: 1 and L0753: 1.	S0114: 1 and L0600: 1.	S0114: 1 and L0745: 1.
	Pro-13 to Asp-20,	Lys-53 to Trn-59	Pro 65 to Glv 70	Gly-77 to Gly-86.	Ser-16 to Lys-21.	Ile-15 to His-21.	Gln-9 to Leu-16.	His-23 to Arg-29.			Arg-8 to Phe-16,	Gln-25 to Gly-31, Gln-37 to Asn-45.	Arg-16 to His-25,	Arg-47 to Phe-57,	Pro-60 to Ser-68.	Lys-40 to Ser-45,	C33-77 W ALB-55.	Val-34 to Asp-39,	Ser-73 to Ser-87, Lys-93 to Arg-100.		· ·	Glu-6 to Lys-12.	Gln-6 to Asn-20, Val-22 to Thr-36.		Gln-13 to Ser-21.			Lys-24 to Glu-30, Ser-46 to Gln-54.	Leu-2 to Asp-12.
	19381				17182	17183	17184	17185	17186	17187	17188		17189			17190	, ,	17191		19382	17192	17193	17194	17195	17196	17197	17198	17199	17200
	466 - 152			,	136 - 324	131 - 328	173 - 364	170 - 316	343 - 585	.1 - 318	169 - 405		215 - 433			1 - 165		343 - 648	***************************************	212 - 499	135 - 446		151 - 357	32 - 181	67 - 243	3 - 227	131 - 334	363 - 202	102 - 224
	9629				7430	7431	7432	7433	7434	7435	7436		7437			7438	000	7439		9630	7440	7441	7442	7443	7444	7445	7446	7447	7448
	963220				866817	705365	935451	708803	866821	744333	713793		791546			661933	00000	858998		988856	721825	792516	932387	784475	457077	714040	702673	732368	787069
					HSAZA42	HSAZA39	HSAZA06	HSAYT37	HSAYT29	HSAYR63	HSAYO42		HSAYK93			HSAXS16	TICA XXX 400	HSAXM08			HSAXJ95	HSAXJ93	HSAXI05	HSAXH85	HSAXG45	HSAXE42	HSAXE33	HSAXC55	HSAXB89

					9p22.2																										
S0114: 1, L0748: 1 and L0749: 1.	\$0114: 1	S0114: 1	S0114: 1 and L0592: 1.	S0114: 1	S0114: 1 and L0439: 1.	S0114: 1 and L0748: 1.		S0114: 1 and L0595: 1.	S0114: 1 and L0748: 1.	L0758; 3 and S0114: 1.		S0114: 1 and L0717: 1.	L0748: 4 and S0114: 1.	S0114: 1 and L0750: 1.	S0114: 1	S0114: 1	S0114: 1	S0114: 1	S0114: 1, L0779: 1 and	L0591: 1.	S0114: 1 and L0754: 1.	L0753: 2, S0114: 1 and	L0521: 1.	S0114: 1 and L0748: 1.	S0114: 1 and L0745: 1.	S0114: 1 and L0740: 1.	S0114: 1 and L0748: 1.	S0114: 1, L0438: 1 and	L0439; 1.	S0114: 1	S0114: 1 and L0748: 1.
Leu-2 to Thr-7.	Tyr-21 to Arg-26, Val-48 to Ala-54.	His-56 to Ser-62.				Ile-1 to Leu-8,	Ser-31 to Thr-40, Glu-69 to Pro-80.	Asn-44 to Arg-57.		Asn-13 to Lys-20,	Val-92 to Arg-98.	Ser-20 to Leu-28.		Gly-5 to Glu-10.			Glu-51 to Asn-61.		Pro-15 to Phe-22,	Gly-46 to His-55.		Leu-3 to Lys-9.								Ser-1 to Gln-12.	
17201	17202	17203	17204	17205	17206	17207		17208	17209	17210		17211	17212	17213	17214	17215	17216	17217	17218		17219	17220		17221	17222	17223	17224	17225		17226	17227
114 - 389	21 - 239	1 - 204	85 - 222	241 - 381	40 - 120	72 - 368		166 - 345	37 - 159	3 - 359		176 - 319	175 - 285	143 - 292	212 - 361	14 - 220	14 - 283	134 - 307	273 - 539		167 - 322	146 - 346		38 - 253	2 - 328	194 - 349	3 - 236	316 - 447		102 - 347	12 - 170
7449	7450	7451	7452	7453	7454	7455		7456	7457	7458		7459	7460	7461	7462	7463	7464	7465	7466		7467	7468		7469	7470	7471	7472	7473		7474	7475
792888	574184	574182	866861	953851	765818	968804		765819	711441	959943		959938	772444	753569	526767	418690	954897	866872	971727		964949	716820		675220	728598	706928	677435	660572		068998	757409
HSAWY92	HSAWY81	HSAWY79	HSAWY33	HSAWY07	HSAWW74	HSAWU12		HSAWS74	HSAWS40	HSAWR08		HSAW008	HSAWL77	HSAWL68	HSAWK67	HSAWK32	HSAWK21	HSAWK20	HSAW113		HSAWI11	HSAWG44		HSAWF86	HSAWF52	HSAWD34	HSAWD24	HSAWD15		HSAWC55	HSAWB70

HSAVZ82	881166	7476	115 - 291	17228		S0114: 1 and L0748: 1.		
HSAVZ63	574195	7477	113 - 253	17229	Thr-5 to Thr-10.	S0114: 1		
HSAVY10	968230	7478	36 - 212	17230		S0114: 1 and L0601: 1.		
HSAVY02	920721	7479	81 - 422	17231	Thr-11 to Ser-18, Leu-56 to Glu-70.	S0114: 1, L0527: 1 and L0682: 1.		
HSAVX22	674919	7480	116 - 247	17232		S0114: 1 and L0748: 1.		
HSAVW13	862754	7481	115 - 225	17233		S0114: 1 and L0748: 1.		
HSAVV36	988998	7482	2 - 208	17234		S0114: 1, L0748: 1 and L0361: 1.		
HSAVS48	721856	7483	21 - 131	17235		S0114: 1 and L0746: 1.		
HSAVQ73	929276	7484	501 - 695	17236	Leu-47 to Asp-61.	S0114: 1 and L0604: 1.	11q23.3 17	176000, 261640, 602574, 602574
HSAVP56	733616	7485	3 - 206	17237		S0114: 1 and L0748: 1.		
HSAVO05	932379	7486	35 - 253	17238	Ser-26 to Cys-33, Gly-53 to Pro-62.	S0114: 1 and L0773: 1.		
HSAVN72	574129	7487	3 - 296	17239		S0114: 1 and L0748: 1.		
HSAVN48	526505	7488	1 - 144	17240		S0114: 1		
HSAVN24	574106	7489	2 - 112	17241	Glu-1 to Trp-16, His-18 to Ser-26.	S0114: 1		
HSAVK84	783183	7490	127 - 246	17242		S0114: 1 and L0748: 1.		
HSAVI84	783182	7491	84 - 233	17243		L0748: 3, S0114: 1, L0740: 1 and L0749: 1.		
HSAVI53	728361	7492	1 - 219	17244	Lys-1 to Leu-25.	L0605: 2 and S0114: 1.		
HSAVG96	796544	7493	86 - 238	17245		S0114: 1 and L0598: 1.		
HSAVF17	664515	7494	221 - 313	17246	Asn-19 to Phe-24.	S0114: 1, L0766: 1, L0665:		
HSAVE61	742076	7495	238 - 447	17247	Gly-43 to Ser-57.	S0114: 1 and L0599: 1.		
HSAVA79	781800	7496	1-111	17248	Val-2 to Glu-7.	S0114: 1 and L0731: 1.		
HSAVA22	674977	7497	79 - 189	17249	Phe-17 to Gln-23.	S0114: 1, L0521: 1 and L0748: 1.		
HSAUZ11	609/96	7498	42 - 338	17250	Arg-13 to Gly-19.	S0114: 1 and L0766: 1.		
HSAUW24	67624	7499	57 - 341	17251	Tyr-46 to Phe-51.	S0114: 1 and L0748: 1.		
HSAUU25	679278	7500	315 - 659	17252	Asn-32 to Pro-40, Ser-49 to Cys-54.	L0748: 3, L0749: 3, L0596: 2 and S0114: 1.		
HSAUQ81	866192	7501	49 - 309	17253		AR051: 41, AR050: 27,		

																				,								
AR054; 22 S0114: 1 and L0766: 1.		S0114: 1 and L0748: 1.	S0114: 1 and L0754: 1.	AR061: 1, AR089: 1	S0114: 1 and L0686: 1.	S0114: 1 and L0591: 1.	S0114: 1 and L0750: 1.	L0789: 2, S0114: 1, L0748:	1 alla LOCOV. 1.	S0114: 1 and L0599: 1.	S0114: 1, L0749: 1 and	L0589: 1.	S0114: 1, L0740: 1 and	S0114: 1 and L0748: 1.	S0114: 1		S0114: 1 and L0748: 1.	L0745: 2 and S0114: 1.	L0779: 4, L0758: 2, S0114:	1 and LU/49: 1.	S0114: 1 and L0748: 1.	S0114; 1 and L0740: 1.	S0114: 1 and L0748: 1.	S0114: 1, L0766: 1 and	S0114: 1 and L0748: 1.			
			Pro-16 to Phe-22.	Ala-23 to Asp-28,	Gln-53 to Tyr-60.	Pro-11 to Ser-17.	Pro-5 to Gly-15, Ala-35 to Gln-40		Leu-3 to Gly-11, Glu-14 to Ala-21						Glv-15 to Lvs-20.		Lys-23 to Thr-35.		Glu-31 to Tyr-43,	Pro-94 to Arg-108.		Leu-12 to Lys-31.		Lys-36 to Ile-41, Val-56 to I vs-61	Asn-3 to Ser-8,	Asn-16 to His-24,	Phe-42 to Gly-48,	Arg-71 to Lys-81, Gly-88 to Gly-98.
	19383	17254	17255	17256		17257	17258	17259	19384	17260	17261		17262	17263	17264	19385	17265	17266	17267	0,000	17268	17269	17270	17271	17272			
	201 - 389	161 - 373	61 - 201	3 - 302		110 - 280	2 - 238	485 - 129	405 - 608	2 - 211	3 - 224		358 - 483	37 - 237	179 - 406	50 - 229	157 - 357	101 - 268	3 - 401		223 - 333	284 - 529	526 - 681	2 - 184	57 - 350			
	9631	7502	7503	7504		7505	7506	7507	9632	7508	7509		7510	7511	7512	9633	7513	7514	7515		ļ		ļ	7519	7520			
	899273	730928	716847	908440		766240	883205	422961	843427	954543	917314		765859	920827	514840	567319	705677	778268	674986	70000	790394	725879	843424	866949	732406	-		
		HSAUQ54	HSAUQ44	HSAUL84		HSAUK72	HSAUK48	HSAUI23		HSAUH06	HSAUH02		HSAUG74	HSAUD02	HSAUB69		HSAUB39	HSATZ81	HSATY22	TO A THING A	HSATW91	HSATW51	HSATV96	. HSATS25	HSATQ55			

														,														
L0747: 3, L0756: 2, S0114: 1 and L0750: 1.		S0114: 1 and L0748: 1.	S0114: 1 and L0599: 1.	L0518: 3 and S0114: 1.	S0114: 1 and L0509: 1.	L0748: 3 and S0114: 1.	S0114: 1 and L0600: 1.	L0731: 2 and S0114: 1.	H0074: 1 and L0748: 1.	H0074: 1	H0074.1	n00/4:1	L0748: 2, L0749: 2 and	H0074: 1.	H0074: 1	H0074: 1	H0074: 1		H0074: 1 and L0748: 1.	H0074: 1	L0766: 3 and H0074: 1.	H0074: 1	AR050: 87, AR054: 77,	AR051: 70	H00/9: 1		S0216: 1 and L0748: 1.	S0216: 1
Gly-1 to Gly-8, Ser-26 to Ala-39,	Ser-52 to Arg-58, Ser-63 to Leu-71, Ala-90 to Ser-95.			Arg-1 to Asn-8, Glu-10 to Asp-16.	Pro-51 to Pro-58.		Ser-14 to Thr-23.	Asp-14 to Thr-20.		Asp-1 to Gly-7,	Pro-41 to GIR-4/.	Pro-15 to Thr-24.					Ser-31 to Pro-37,	Fro-52 to 1rp-60, Leu-66 to Leu-71.		Leu-1 to Asn-11.	Val-19 to Met-29.		Leu-98 to Ala-105,	Pro-120 to Gly-127.		Leu-98 to Ala-105, Pro-120 to Gly-127.		Thr-1 to His-12.
17273		17274	17275	17276	17277	17278	17279	17280	17281	17282	17702	1/202	17284		17285	17286	17287		17288	17289	17290	17291	17292			19386	17293	17294
356 - 640		281 - 448	42 - 176	3 - 227	124 - 429	224 - 448	269 - 424	219 - 332	77 - 298	142 - 282	171 3/1	1/1 - 341	126 - 401		356 - 75	2 - 178	275 - 6	_	317 - 138	257 - 355	29 - 253	529 - 362	189 - 596			182 - 589	191 - 475	13 - 252
7521		7522	7523	7524	7525	7526	7527	7528	7529	7530	7531	/331	7532		7533	7534	7535		7536	7537	7538	7539	7540			9634	7541	7542
862436		866954	456326	920825	866955	728414	602167	761511	790524	429558	518777	710/4/	503600		793000	867387	503543		503544	503569	203267	960941	911178			972489	859817	974350
HSATM64		HSATM19	HSATM09	HSATL02	HSATI58	HSATE53	HSATC79	HSATC72	HPSAD92	HPSAB26	HDGAB34	III SADZ4	HPSAB15		HPSAA94	HPSAA93	HPSAA91		HPSAA75	HPSAA41	HPSAA30	HPSAA03	HNNTA24				HNHPF67	HNHPD68

																				70														
-													<u> </u>				<del></del>	-		134570														
																				6p24														
S0216: 1			L0532: 1 and S0216: 1.	1	L0493: 2 and S0216: 1.	:	S0216: 1 and L0589: 1.		S0216: 1	S0216: 1	L0521: 1 and S0216: 1.	S0216: 1 and L0592: 1.			AD051. 25 AD050. 24	ANUJI. 23, ANUJU. 24,	AR054: 20, AR089: 17,	AR061: 9	S0216: 1	S0216: 1 and L0599: 1.	S0216: 1 and L0748: 1.	AR051: 23, AR054: 11,	AR050: 9, AR061: 8,	AR089: 5	S0216: 1	S0216: 1	S0216: 1 and L0749: 1.	S0216: 1 and L0750: 1.	L0370: 1 and S0216: 1.	L0775: 1, S0216: 1, L0438:	1 and L0752: 1.	S0216: 1	S0216: 1	L0753: 2 and S0216: 1.
Glu-12 to Ser-18,	Arg-24 to Pro-35,	Pro-43 to Arg-49.	Lys-21 to Pro-27,	741 W 1111-47.	Ala-47 to Gly-52,	Pro-87 to Ser-98.	Gly-1 to Ser-7,	Glu-9 to Asp-18.	Gln-43 to His-51.		Ser-61 to Pro-72.	Asn-1 to Asn-10,	Glu-12 to Val-20,	Trp-29 to Gly-39, Ser_53 to Thr_60	Pro-04 to Ser-102	110-74 10 501-102.						Ile-1 to Ser-16.						Val-2 to Thr-12.	Leu-33 to Ser-40.			Ser-28 to Arg-33.		Pro-21 to Ser-26, His-29 to Arg-35,
17295			17296		17297		17298		17299	17300	17301	17302			17303	COCIT				17304	17305	17306				17307	17308	17309	17310	17311		17312	17313	17314
3 - 176			138 - 278		108 - 473		2 - 256		3 - 215	293 - 445	103 - 336	167 - 358			2 508	000				133 - 279	148 - 429	143 - 514				3 - 326	200 - 367	249 - 88	225 - 512	146 - 403		223 - 483	1 - 255	71 - 529
7543			7544	77.42	/545		7546		7547	7548	7549	7550			7551	100				7552	7553	7554				7555	7556	7557	7558	7559		7560	7561	7562
915303			974344	10000	829824		790911		974327	974330	838790	952285			948720	2	_			773683	958377	928378				918684	915358	950971	918715	859836		800482	974343	870121
HNHOX01			HNHOV24	COOTING	HINHOU36		HNHOP92		HNHOP88	HNHOP32	HNHOI63	HNHOI07			HNHOF94					HNHNT20	HNHNQ08	HNHNP81				HNHNP66	HNHN001	HINHINM39	HNHNK02	HNHNJ24		HNHNI09	HNHNH51	HNHND85

											:														
	60216.1	30210: 1		S0216: 1 and L0748: 1.	S0216: 1 and L0777: 1.	S0216: 1 and L0745: 1.	S0216: 1 and L0748: 1.	S0216: 1 and L0589: 1.	S0216: 1	S0216: 1	S0216: 1 and L0731: 1.	S0216: 1 and L0748: 1.	S0216: 1 and L0758: 1.	L0365: 1 and S0216: 1.	S0216: 1 and L0438: 1.	S0216: 1 and L0361: 1.	L0520: 1 and S0216: 1.	L0749: 3 and S0216: 1.	L0659: 1, L0663: 1, S0216: 1 and L0601: 1.	S0216: 1 and L0592: 1.		L0385: 1 and S0216: 1.	L0741: 4 and S0216: 1.	L0439: 2 and S0216: 1.	L0748: 2, L0766: 1, S0216: 1 and L0779: 1.
Pro-41 to Leu-50,	Thr. 24 to Cor. 20	1 III-24 to Ser-29,   Dro 31 to Thr 40	Leu-44 to Val-61.		Pro-47 to Gly-55.				Asn-7 to Ile-25, Ala-29 to His-41.	Ile-33 to Ser-41.	Pro-1 to Thr-7, Pro-26 to Tyr-31.		Phe-1 to Phe-7, Lys-23 to Lys-30.		Glu-9 to Lys-19.	Lys-8 to Cys-14.				Ser-10 to Thr-21,	Pro-23 to Asn-34, Leu-42 to Thr-51.		Ala-17 to Cys-32, Gln-38 to Lys-47, Ser-58 to Ala-64, Aro-66 to Tm-72.		
	17215	1/313		17316	17317	17318	17319	17320	17321	17322	17323	17324	17325	17326	17327	17328	17329	17330	17331	17332		17333	17334	17335	17336
	0000	677 - 7		186 - 320	34 - 342	149 - 322	124 - 234	220 - 426	2 - 190	155 - 286	2 - 151	6 - 131	2 - 169	571 - 323	353 - 66	16 - 213	402 - 587	387 - 566	335 - 556	3 - 221		277 - 519	2 - 256	379 - 44	84 - 434
	7563	2007	*	7564	7565	7566	7567	7568	7569	7570	7571	7572	7573	7574	7575	7576	7577	7578	7579	7580		7581	7582	7583	7584
	07/1224	7/4554		952273	790945	783887	918709	859842	975207	975206	784986	859847	918649	859849	859850	963542	859851	952279	855071	756668		915363	923091	785104	723868
	ENTENID 81	TINDIND I	ţ	HNHND07	HNHNB92	HNHNB85	HNHNB02	HNHMZ49	HNHMY52	HNHMS26	98ОМНИН	HNHMQ28	HNHMF02	HNHLY58	HNHLW34	HNHLW10	HNHLR36	HNHLQ07	HNHLG36	HNHLD70		HNHLC01	HNHLB03	HNHKT86	нинкозо

L0758: 3 and S0216: 1.	L0766: 1, S0216: 1 and L0740: 1.	S0053: 1 and L0439: 1.	S0053: 1 and L0439: 1.	S0053: 1, L0748: 1 and L0749: 1,	S0053: 1 and L0596: 1.	S0053: 1 and L0591: 1.	S0053: 1	S0053: 1	S0053: 1	S0053: 1				S0053: 1	S0053: 1	S0053: 1 and L0600: 1.	S0053: 1	S0053: 1	L0758: 2, S0053: 1 and L0602: 1.	S0053: 1 and L0589: 1.	S0053: 1	L0369: 1 and S0053: 1.		S0053: 1	S0053: 1	L0589: 2 and S0053: 1.	S0053: 1
Pro-20 to His-29.	170 <u>.</u> 170 <u>.                                    </u>	)S	SC	Asp-1 to Pro-11, SC Gly-27 to Cys-34. L07			OS	SO	Thr-35 to Pro-40. S0		Pro-30 to Pro-36,	Arg-47 to Ser-58,	Leu-60 to Lys-65.		08	Glu-5 to Pro-14. S0	Pro-1 to Lys-12, S0 Lys-18 to Leu-24.			Pro-26 to Lys-34, S0			0S	0S	Glu-8 to Lys-14, S0		
17337	17338	17339	17340	17341	17342	17343	17344	17345	17346	17347				17348	17349	17350	17351	17352	17353	17354	17355	17356	17357	17358	17359	17360	17361
350 - 679	335 - 505	189 - 1	36 - 284	137 - 442	136 - 501	172 - 336	168 - 383	86 - 316	101 - 292	149 - 346				41 - 184	2 - 229	3 - 227	138 - 55	101 - 193	89 - 196	136 - 291	1 - 228	117 - 440	12 - 164	110 - 307	45 - 260	144 - 311	1 - 243
7585	7586	7587	7588	7589	7590	7591	7592	7593	7594	7595				7596	7597	7598	7599	0092	7601	7602	7603	7604	2097	909/	2092	8092	7609
923276	859925	730706	781195	784345	736064	830068	784698	741836	726576	705407				709278	708714	694365	657245	924221	741839	948731	743400	859953	496480	781977	775409	660304	625615
HNHKP03	HNHKI61	HNHIS54	HNHIR83	HNHIC85	HNHHL58	HNHHG53	HNHHF86	HNHHF61	HNHHF52	HNHHF39				HNHHF38	HNHHF37	HNHHF28	HNHHF13	HNHHF03	HNHHC61	HNHGX61	HNHGV62	HNHGU56	HNHGT92	HNHGT84	HNHGT80	HNHGT15	HNHGT09

		125852, 126452, 126452, 126452, 130650, 141900, 141900, 141900, 142000, 142200, 142200, 142270, 150000, 176730, 176730, 191290, 192500, 257200, 257200, 257200, 257200, 257200, 2600856, 601680, 602631, 602631						·			
		11p15.5-p15.4									
	L0749: 3, L0748: 2 and S0053: 1.	L0748: 2 and S0053: 1.	L0758: 2 and S0053: 1.	L0745: 4 and S0053: 1.	S0053: 1	S0053: 1 and L0592: 1.	S0053: 1 and L0748: 1.	AR051: 10, AR050: 10, AR054: 9 S0053: 1 and L0361: 1.	S0053: 1 and L0740: 1.	S0053; 1	S0053: 1
Asp-16 to Ile-21, Ile-25 to Lys-36.		Cys-51 to Ser-57, Arg-68 to His-77, Asn-93 to His-102.	Glu-5 to Ser-14, Pro-22 to Cys-27.		Glu-92 to Lys-103.	Ala-8 to Leu-13, Lys-26 to Val-32.	His-1 to Thr-7, Glu-28 to Asn-37.		Pro-5 to Gly-12.	Glu-18 to Ser-29, Val-31 to Arg-41, Gly-47 to Phe-54.	Lys-29 to Trp-40.
	17362		17364	17365	17366	17367	17368	17369	17370	17371	17372
	350 - 748	547 - 879	3 - 314	159 - 488	1 - 309	2 - 241	3 - 251	117 - 329	18 - 443	3 - 242	44 - 295
	7610	7611	7612	7613	7614	7615	7616	7617	7618	7619	7620
	677228	582523	859972	740396	623826	781208	829983	561093	686735	790212	777955
	HNHGS24	HNHG045	HNHGN27	HNHGI60	HNHGI03	HNHGH83	HNHGH22	HNHGG39	HNHGF28	HNHGE91	HNHGE81

									:																								
S0053: 1	S0053: 1	L0589: 3 and S0053: 1.	S0053: 1	S0053: 1	S0053: 1			S0053: 1 and L0603: 1.	S0053: 1	S0053: 1			L0617: 1, L0157: 1 and	80053: 1.		S0053: 1	S0053: 1	S0053: 1	S0053: 1	S0053: 1	S0053: 1		L0761: 1, S0053: 1 and	L0758: 1.	S0053: 1	S0053: 1 and L0592: 1.			L0365: 1 and S0053: 1.	S0053: 1		S0053: 1 and L0592: 1.	S0053: 1 and L0779: 1.
Glu-29 to Asp-35.	Gly-1 to Ser-7, Thr-12 to I.vs-19.	Thr-50 to Glu-59.		Pro-16 to Tyr-24.	Gly-1 to Arg-17,	Ser-24 to Cys-33,	Thr-78 to Arg-88.	Ala-24 to Glu-30.	Asn-22 to Lys-31.	Ser-1 to Gln-9,	Pro-15 to Thr-27,	His-29 to Tyr-39.	Cys-20 to Ile-27,	Thr-45 to Gly-51,	Gly-93 to Gly-101.	Lys-36 to Tyr-41.	Gln-80 to Leu-87.	Arg-5 to Glu-10.		Gln-11 to Asp-19.	Ser-14 to Leu-20,	Arg-62 to Gly-68.				Asp-19 to Glu-28,	Ser-38 to Arg-44,	Gly-51 to Lys-62.		Gln-20 to Glu-26,	Ser-32 to Glu-47.	Ala-9 to Asn-17.	Tyr-17 to His-22.
17373	17374	17375	17376	17377	17378			17379	17380	17381			17382			17383	17384	17385	17386	17387	17388		17389		17390	17391			17392	17393		17394	17395
107 - 286	1 - 174	1 - 339	59 - 169	50 - 154	1 - 396			1 - 249	109 - 285	103 - 225			3 - 359			1 - 192	58 - 423	14 - 247	2 - 250	53 - 271	44 - 328		377 - 676		111 - 260	3 - 188			287 - 448	55 - 222		33 - 218	111 - 314
7621	7622	7623	7624	7625	7626			7627	7628	7629			7630			7631	7632	7633	7634	7635	7636		7637		7638	7639			7640	7641		7642	7643
775214	753052	683294	698046	677234	970722		ļ	959494	792740	790199			720747			699286	670949	859991	769899	962224	953414		970726		613803	752305			959475	961275		959484	953403
HNHGE79	HNHGE68	HNHGE44	HNHGE31	HNHGE24	HNHGE12			HNHGD08	HNHGC92	HNHGC91			HNHGC45			HNHGC32	HNHGC21	HNHGC20	HNHGC19	HNHGC08	HNHGC07		HNHGB12		HNHGA53	HNHFY68			HNHFY08	HNHFX10		HNHFX08	HNHFX07

,																						
AR061: 12, AR089: 5 S0053: 1	AR051: 103, AR050: 100, AR054: 83 S0053: 1	AR051: 11, AR061: 3, AR089: 2, AR050: 2, AR054: 1 S0053: 1	S0053: 1 and L0748: 1.	S0053: 1 and L0608: 1.	S0053: 1 and L0589: 1.	AR051: 88, AR050: 84, AR054: 67 S0053: 1	S0053: 1 and L0745: 1.	L0766: 1 and S0053: 1.	S0053: 1	S0053: 1				S0053: 1	S0053: 1	$\sim$	AR061: 7, AR089: 4,	AR051: 1 S0053: 1	L0740: 2 and S0053: 1.			AR051: 21, AR050: 8 S0053: 1
	Pro-23 to Trp-32.	Pro-37 to Ala-47.	Gln-6 to Ser-15, Pro-17 to Ala-29.			Lys-47 to Pro-54.		Pro-23 to Gly-29.	Gly-12 to Trp-17.	Lys-1 to Asp-9,	Lys-15 to Glu-21,	Glu-29 to Gly-34.		Ser-1 to Lys-10, Gly-16 to Gly-27.	Ser-30 to Gly-38.	His-8 to Gly-18,	Ala-39 to Gly-45,	Pro-94 to Glu-101.	Val-24 to Glu-29,	Ser-62 to Ser-68, Ala-75 to Ser-81	Lys-138 to Phe-145.	
17396	17397	17398	17399	17400	17401	17402	17403	17404	17405	17406			19387	17407	17408	17409			17410			17411
520 - 768	2 - 151	264 - 467	155 - 352	220 - 387	256 - 429	3 - 287	129 - 284	1 - 204	1 - 270	341 - 514			631 - 329	160 - 495	347 - 469	28 - 480			75 - 734			153 - 281
7644	7645	7646	7647	7648	7649	7650	7651	7652	7653	7654			9635	7655	7656	7657			7658	_		7659
975415	566339	937179	733513	970882	757646	999888	186967	924606	506283	486847			490923	576414	973273	903741			675942			638126
HNHFV49	HNHFV30	HNHFU64	HNHFU56	HNHFU12	HNHFR69	HNHFP94	HNHFP89	HNHFP03	HNHFM74	HNHFM54				HNHFL96	HNHFL28	HNHFH24			HNHFH23			HNHFF79

						5				-,																				
S0053: 1 and L0748: 1.	L0758: 2 and S0053: 1.	AR050: 7, AR054: 6, AR051: 3 S0053: 1	S0053: 1	L0748: 2 and S0053: 1.	,	S0053: 1, L0438: 1 and	LU/48: 1.	S0053: 1 and L0740: 1.	S0053: 1			S0053: 1						00067. 1 11 0500. 1	30033: 1 alid L0369: 1.	L0439: 2, S0053: 1 and	L0751: 1.			S0053: 1	S0053: 1 and L0439: 1.	S0053: 1	S0053: 1 and L0439: 1.	AR054: 16, AR050: 12,	AR051: 8 S0053: 1	L0766: 1 and S0053: 1.
Asn-37 to Cys-43, Gly-50 to Phe-57.		Pro-19 to Gly-32.	Arg-10 to Thr-20.	Lys-2 to Thr-8,	Ser-12 to Trp-25, Trp-33 to Cys-39.				Gly-34 to Ser-41.	Gly-34 to Ser-41.	Gly-34 to Ser-41.	Glu-1 to Ser-9,	Lys-14 to Leu-20,	Asp-44 to Gly-57.	Gln-1 to Ala-13,	Pro-52 to Gly-57,	Leu-84 to Gln-90,	F10-72 to Asp-70.	70.7	Gin-12 to Met-20,	Pro-26 to Gly-31,	Phe-39 to Asn-44,	Glu-50 to Thr-64.	Arg-11 to Asn-20.			Ser-1 to Trp-15.	Arg-25 to Gln-34.		Pro-46 to Met-51.
17412	17413	17414	17415	17416		17417		17418	17419	19388	19389	17420			19390			17401	17421	1/422				17423	17424	17425	17426	17427		17428
2 - 178	186 - 308	1 - 147	9 - 125	256 - 498		54 - 197		72 - 275	68 - 277	68 - 277	74 - 283	505 - 278			71 - 364			10 164	10 - 104	248 - 553				114 - 380	244 - 402	20 - 154	305 - 472	22 - 168		35 - 205
7660	7661	7662	7663	7664		7665		7666	1991	9636	9637	8992			9638		-	0232	7007	0/9/				7671	7672	7673	7674	7675		9/9/
692811	916782	576448	842707	781217		666524		606899	535701	535815	923484	490390			785285			200020	00/00/	/06636				506284	757649	800165	669763	888553		419752
HNHFF30	HNHFE01	HNHFD68	HNHFB21	HNHEW83		HNHEW18		HNHEU20	HNHEQ03			HNHEP86						ITAMIET 70	TRITIET 24	HNHEL34				HNHEL27	HNHEK69	HNHEJ78	HNHEJ20	HNHEI90		HNHEI37

						:																							
L0617: 1 and S0053: 1.		S0053: 1		S0053: 1	S0053: 1		S0053: 1 and L0759: 1.	AR051: 22, AR054: 15,	AR050: 11 S0053: 1	L0749: 2, S0053: 1 and	L0748: 1.	S0053: 1	AR054: 14, AR051: 1,	AR050: 1	30023; 1 and £0739; 1,	4 11 0200 1	S0053: 1 and L0752: 1.	S0053: 1 and L0748: 1.	L0509: 1 and S0053: 1.	L0589: 2 and S0053: 1.	·			AR054: 15, AR050: 3		L0748: 4 and S0053: 1.	AR051: 28, AR050: 23,	S0053: 1	S0053: 1
Arg-5 to His-11,	Thr-13 to Cys-22, Cys-50 to Thr-55.	Leu-7 to Asp-17, Gly-19 to His-27,	Pro-33 to Glu-49.	Met-18 to Cys-23.		Ser-46 to Ser-51.				Ser-17 to Asp-23,	Ile-32 to Arg-38.	Thr-50 to Gly-55.							Lys-8 to Pro-17, Leu-92 to Ala-99.	:	Arg-1 to Ser-17,	Arg-35 to Ser-40,	Gly-64 to Leu-74.	Ala-19 to Leu-25.	Ala-19 to Leu-25.		Thr-30 to Thr-51.		
17429		17430		17431	17432	19391	17433	17434		17435		17436	17437		10207	17770	1/438	17439	17440	17441	19393			17442	19394	17443	17444		17445
22 - 198		23 - 190		201 - 362	493 - 230	70 - 339	351 - 485	3 - 206		450 - 599		109 - 330	151 - 396		156 380	100-000	1 - 219	302 - 454	257 - 568	246 - 1	91 - 339			67 - 288	58 - 279	2 - 349	185 - 3		55 - 198
1677		7678		6292	7680	9639	7681	7682		7683		7684	7685	-	0640	7675	/080	7687	7688	6892	9641			0692	9642	7691	7692		7693
973296		760464		576417	958854	958883	924619	576529		666594		973295	542062		753133	77.4032	/34933	692875	883870	422903	608199			559341	860083	792467	863116		974277
HNHEH28		HNHEG71		HNHEF53	HNHEF08		HNHEE03	HNHED88		HNHED18		HNHDZ25	HNHDY14			TATTITY CT	HINHDAS/	HNHDX30	HNHDW94	HNHDW16				HNHDV95		HNHDV93	HNHDV16		HNHDT83

																	109270, 109270,	109270, 109270,	109270, 113705,	113705, 144200,	148065, 148066,	148066, 148067,	148067, 148069,	148080, 154275,	168610, 171190,	176705, 185800,	200350, 221820,	232200, 249000,	252920, 253250,	600119, 600119,	601363, 601844			
																	17q21	•																
S0053: 1	S0053: 1		S0053: 1	80053: 1	S0005: 2, S0053: 1 and	L0589: 1.			L0747: 2 and S0053: 1.			80053: 1	S0053: 1		S0053: 1 and L0361: 1.	AR050: 2, AR051: 0 S0053: 1	S0053: 1															S0053: 1 and L0756: 1.	80053: 1	<b>.</b>
	Ser-12 to Lys-24,	Lys-29 to Arg-35.	Ser-20 to Pro-26.		Gly-14 to Arg-26,	Thr-43 to Arg-58,	Pro-63 to Gly-71,	Lys-86 to Gly-95.	Thr-40 to Ser-46,	Pro-48 to Pro-58	Ser-65 to Glu-70.		Gln-1 to Leu-12,	Ser-16 to His-21.		Pro-49 to Lys-57.	Gly-1 to Gly-15,	Gly-18 to His-26,	Pro-43 to Gly-62.	•						٠								Val-36 to Gly-43.
17446	17447		17448	17449	17450				17451			17452	17453		17454	17455	17456															17457	17458	19395
2 - 166	3 - 122		2 - 130	3 - 92	2 - 382				215 - 427			74 - 319	68 - 334		92 - 379	241 - 71	24 - 215										<del></del>			-		207 - 416	317 - 105	99 - 290
7694	7695		7696	7697	8692				669/			7700	7701		7702	7703	7704															7705	90//	9643
576483	573332		573355	576464	932223				602099			574312	924895		953883	520297	904546															757760	782897	782898
HNHDT33	HNHDT32		HNHDT19	HNHDT12	HNHDQ05				HNHDM15			HNHDH40	HNHDH03		HNHDF07	HNHDD52	HNHDC29															HNHDB69	HNHCZ84	

													-	-									<del></del>								
		··· <u></u>		_		_															-										
									-																						
		S0053: 1	S0053: 1 and L0780: 1.		S0053: 1 and L0759: 1.	S0053: 1 and L0599: 1.	S0053: 1 and L0600: 1.	S0053: 1 and L0777: 1.	S0053: 1 and L0592: 1.	S0053: 1 and L0748: 1.	S0053: 1	AR051: 23, AR050: 14,	AR061: 10, AR054: 4,	AR089: 3	S0053: 1			S0053: 1	S0053: 1	.L0748: 6 and S0053: 1.	AR054: 16, AR051: 16,	AR050: 3	S0053: 1	AR054: 19, AR050: 18,	AR051: 13 S0053: 1	S0053: 1 and L0748: 1.			S0053: 1		S0053: 1 and L0589: 1.
Thr-5 to Glu-11,	Lys-28 to Arg-36.	Thr-72 to Pro-77, Pro-82 to Phe-87.	Pro-1 to Val-7,	Asp-19 to Tyr-25, Lys-39 to Phe-46.					Arg-18 to Val-23.	Cys-8 to Cys-16.	Leu-9 to Trp-14.					Lys-17 to Thr-23,	His-95 to Thr-101.	Thr-31 to Gly-37.	Ser-6 to Lys-14.							Thr-8 to Phe-18,	Ser-23 to Asn-34,	Ala-37 to Leu-46.		Arg-1 to Ala-9, Phe-18 to Asp-27.	
19396		17459	17460		17461	17462	17463	17464	17465	17466	17467	17468				19397		17469	17470	17471	17472			17473		17474			17475	19398	17476
453 - 265		428 - 697	49 - 339		40 - 150	154 - 294	145 - 267	12 - 362	55 - 294	196 - 366	89 - 211	183 - 593				963 - 553		10 - 168	90 - 161	488 - 655	268 - 465		_	114 - 284		61 - 252			186 - 299	235 - 2	74 - 280
9644		7707	2108		7709	7710	7711	7712	7713	7714	7715	7716				9645		7717	7718	7719	7720			7721		7722			7723	9646	7724
782939		796547	953878		936061	959944	796745	754189	705641	757751	964952	861673	-			956105		574074	574080	702679	668255			860113		796539			583752	840101	920662
		HNHCY96	HNHCY07		HNHCY06	HNHCU08	HNHCO94	HNHCO69	HNHCO39	HNHCM69	HNHCJ11	HNHCI32						HNHCG43	HNHCG32	HNHCD33	HNHCA27			HNHBZ39		HNHBX96			HNHBW54		HNHBU02

																									,						
S0053: 1	S0053: 1		S0053: 1	S0053: 1				S0053: 1, L0740: 1 and	L0777: 1.	S0053: 1 and L0589: 1.	AR051: 11, AR054: 8,	AR050: 7, AR061: 1,	_	S0053: 1	L0439: 2 and S0053: 1.	S0053: 1	S0053: 1 and L0750: 1.	S0053: 1	S0053: 1	S0053: 1	S0053: 1	80053: 1	S0053: 1	L0633: 3 and S0053: 1.	AR050: 14, AR051: 12,	AR054: 2	80053: 1	L0745: 3 and S0053: 1.	L0761: 1 and S0053: 1.	AR061: 6, AR089: 3 L0438: 2, L0439: 2, L0752:	2, L0365: 1 and S0053: 1.
					His-34 to Ser-44,	Cys-80 to Glu-86,	Pro-95 to Gly-101.	Arg-21 to Gln-30.			His-1 to Thr-14.				Cys-3 to Leu-20.	His-1 to Tyr-7, Ser-17 to Glv-24		Asn-2 to Arg-9.	Ala-1 to His-11.			Asn-20 to Gln-30.		Thr-1 to Lys-6, Leu-22 to Leu-30.					Arg-1 to Asp-16, Leu-27 to Gly-32.	Pro-5 to Trp-10, Glu-62 to Gly-67,	Ala-124 to Asn-129.
17477	17478	19399	17479	17480	19400			17481		17482	17483				17484	17485	17486	17487	17488	17489	17490	17491	17492	17493	17494			17495	17496	17497	
2 - 160	296 - 60	2 - 211	243 - 533	686 - 474	314 - 3			241 - 351		76 - 300	923 - 501				82 - 243	259 - 134	67 - 273	58 - 270	2 - 163	99 - 281	132 - 239	1 - 90	56 - 160	3 - 95	2 - 166			66 - 233	1 - 168	189 - 686	
7725	7726	9647	7727	7728	9648			7729		7730	7731				7732	7733	7734	7735	7736	7737	7738	7739	7740	7741	7742			7743	7744	7745	
574093	490789	513489	860125	918387	919069			714044		773747	949027				766526	764293	772452	574295	574386	574393	959961	574402	574404	571334	890594			712605	954088	742116	
HNHBO78	HNHBK57		HNHB148	HNHBI02				HNHBG42		HNHBF78	HNHBF47				HNHBE75	HNHBD73	HNHBC77	HNHAP69	HNHAP55	HNHAP32	HNHAP08	HNHAM81	HNHAM80	HNHAM33	HNHAK41	-		HNHAI41	HNHAI07	HNHAF61	

																	,															
			L0766: 5, L0788: 1, S0053:	1 and LU/4/: 1.	S0053: 1						S0053: 1	S0428: 1 and 1.0600: 1	\$0428:1		AR061: 4. AR089: 1	S0428: 1		S0428: 1		AR061: 7, AR089: 3	L0766: 1, S0428: 1 and L0592: 1.	S0428: 1	S0428: 1 and L0589: 1.	1	S0428: 1 and L0588: 1.			L0761: 1 and S0428: 1.			L0365: 1 and S0428: 1.	S0428: 1
Thr-56 to Pro-64,	Pro-77 to Thr-87,	Thr-95 to Glu-100, Asp-112 to Thr-118.	Arg-24 to Lys-37,	Ser-39 to PTO-70.	Arg-19 to Arg-26,	Gly-44 to Thr-55,	Glu-68 to His-75,	1rp-82 to Asp-8/.		Thr-6 to Cys-17, Gly-23 to Gly-28.	Cys-1 to Ser-6.		Gln-1 to Ser-6.	Asp-30 to Lys-35.	Pro-16 to Ala-31,	Pro-59 to Gly-85,	Pro-87 to Pro-96.	Arg-1 to Lys-6,	Ile-14 to Asn-22.					Tyr-4 to Ile-16.	Gln-5 to Phe-15,	Pro-32 to Ala-39,	Pro-49 to Trp-67.	Gly-21 to Leu-30,	Pro-51 to Ser-56,	Thr-62 to Ala-67.		Pro-22 to Leu-30.
19401			17498	,	17499				19402	19403	17500	17501	17502		17503			17504		17505		17506	17507	17508	17509			17510			17511	17512
378 - 1			429 - 112	0,0	913 - 653				199 - 2	3 - 170	420 - 623	2 - 304	303 - 557		478 - 113			64 - 270		870 - 559		43 - 270	229 - 426	1 - 147	13 - 330			2 - 343			243 - 590	126 - 557
9649			7746	1,10	7747				9650	9651	7748	7749	7750		7751			7752		7753		7754	7755	7756	7757			7758			7759	09//
955094			527975	000000	278965				946565	946634	513675	860142	974046		947104			972821		950134		974049	860162	974045	969158			860169			954991	973415
			HNHAE19	7.ca virturi	HNHAB30						HNHAB15	HNGPR43	HNGPP74		HNGPN54			HNGPM65		HNGPL75		HNGPL05	HNGPI87	HNGPH83	HNGOZ40			HNGOV68			HNGOY32	HNGOP63

								_																					r		
		,																													
S0428: 1 and L0589: 1.	S0428: 1 and L0748: 1.	S0428: 1	L0369: 1 and S0428: 1.	S0428: 1							L0766: 2 and S0428: 1.	L0385: 1 and S0428: 1.	S0428: 1 and L0756: 1.	L0385: 1, L0365: 1 and	80428: 1.				S0428: 1		S0428: 1	S0428: 1	S0428: 1	•		S0428: 1 and L0758: 1.	L0779: 2, L0663: 1, S0428:	1 and L0747: 1.	S0428: 1 and L0596: 1.	S0428: 1	
Ser-7 to Ala-14, Arg-25 to His-31, Pro-48 to Gly-62, Gln-68 to Lys-75.		Glu-1 to Leu-11.		Thr-6 to Ser-13,	Leu-52 to Gly-61,	Arg-66 to Arg-72,	Arg-131 to Pro-136,	Arg-145 to Tyr-150,	Gly-163 to Ser-168,	Ala-186 to Gly-193.		Met-20 to Gly-26.	Pro-35 to Trp-43.	Gln-1 to Gly-9,	Gly-40 to Asn-53,	Arg-67 to Gln-72,	His-100 to Trp-107,	Arg-135 to Pro-140.	Gly-1 to Val-30,	Lys-37 to Glu-53.	Arg-27 to Ser-32.	Lys-30 to Asp-37.	Leu-3 to Gly-13,	Ala-17 to Pro-26,	Glu-44 to Lys-49.		Leu-12 to Cys-19,	Gln-27 to Asn-35.	Pro-38 to Trp-44.	Pro-3 to Gln-13,	Gly-39 to Cys-44, Thr-57 to Trp-66,
17513	17514	17515	17516	17517							17518	17519	17520	17521					17522		17523	17524	17525			17526	17527		17528	17529	
102 - 326	95 - 271	520 - 738	205 - 468	3 - 611		-				•	7 - 243	167 - 385	312 - 590	42 - 470				:	391 - 618		262 - 594	245 - 496	96 - 287			282 - 512	135 - 470		186 - 380	169 - 450	
7761	7762	7763	7764	2977							9922	1911	7768	6922					1770		7771	7772	7773			7774	7775		7776	LLL	
860182	860179	974038	860183	972752							860195	860198	806017	918626					974035		974037	973432	974124			915226	860212		860216	974968	
HNGOP40	HNGOO88	HNGON56	HNGON24	HNGOK04							HNGOF70	HNGNY72	HNGNY16	HNGNY02					HNGNX66		HNGNU85	HNGNS91	HNGNN81			HNGNN01	HNGNJ46		HNGNI78	HNGND75	

	S0428: 1 and L0749: 1.	S0428: 1	S0428: 1	AR089: 119, AR061: 16 S0428: 1	L0662: 1, S0428: 1 and L0759: 1.	S0428: 1 and L0777: 1.	L0761: 1, L0766: 1, S0428: 1 and L0756: 1.	L0809: 2, L0783: 1, L0791: 1, S0428: 1, L0740: 1 and 10752: 1	S0428: 1, L0748: 1 and L0749: 1.	S0428: 1 and L0361: 1.	S0428: 1	L0747: 3 and S0428: 1.	S0428: 1 and L0758: 1.	AR051: 17, AR050: 9, AR054: 7	S0428: 1	S0428: 1, L0748: 1 and L0749: 1.	S0428: 1	S0428: 1	S0428: 1 and L0731: 1.	S0428: 1	L0659: 1 and S0428: 1.
Thr-81 to Ser-87.			Val-23 to Gly-29, Ser-48 to Cys-58.	He-26 to Thr-37.		Pro-1 to Leu-13, Pro-19 to Pro-27.				Arg-39 to Asp-56.		Gln-50 to Ser-61.	Thr-8 to Leu-13, Glu-22 to Asn-32.	Asn-80 to Ser-86, Phe-98 to Glu-105		Ala-26 to Ala-31, Ser-57 to Arg-62.	Pro-20 to Gln-25, Glu-55 to Ala-60.	Pro-22 to Thr-28, Arg-35 to Pro-44.		Gln-7 to Asp-21, Glu-27 to Gly-37.	
	17530	17531	17532	17533	17534	17535	17536	17537	17538	17539	17540	17541	17542	17543		17544	17545	17546	17547	17548	17549
	446 - 580	371 - 592	282 - 575	295 - 26	2 - 151	40 - 375	3 - 179	394 - 642	200 - 592	71 - 247	215 - 400	525 - 830	260 - 439	81 - 425		253 - 438	314 - 508	165 - 479	3 - 146	402 - 557	58 - 156
	7778	7779	7780	7781	7782	7783	7784	7785	7786	7877	7788	7789	7790	7791		7792	7793	7794	7795	9622	7977
	915294	974907	974056	950173	930430	660996	934389	955660	927020	78067	974358	915310	968919	948825		787446	972812	974067	952236	974584	963459
	HNGND01	HNGNA49	HNGMY91	HNGMW65	HNGMT40	HNGMM11	HNGML12	HNGMF02	HNGME04	HNGMD92	HNGMD48	HNGMC01	HNGLY12	HNGLY08		HNGLS90	HNGLR54	HNGL021	HNGLL07	HNGLK36	HNGKY10

																				٠								
S0428: 1	S0428: 1 and L0589: 1.	S0428: 1, L0748: 1 and L0749: 1.		AR051: 17, AR050: 17,	AR061: 7, AR089: 3,		LU800: 1 and S0428: 1.	S0428: I	S0428: 1 and L0731: 1.					L0655: 1 and S0428: 1.	L0518: 1 and S0428: 1.	S0428: 1	AR051: 14, AR054: 4.	AR050: 1	S0428: 1		S0428: 1	S0428: 1 and L0758: 1.	L0787: 1, S0428: 1 and L0592: 1.	S0052: 1 and L0592: 1.	S0052: 1 and L0589: 1.	S0052: 1		S0052: 1
Glu-36 to Pro-42.	Val-20 to Glu-27.	Pro-4 to Ala-9, Val-18 to Trp-30, His-48 to I en-50	Phe-91 to Asn-99.			•	Pro-235 to Leu-241.		Gly-23 to Pro-28,	FIO-51 to ASP-50,	Ala-38 to Trp-59,	His-71 to Gln-76,	Lys-79 to Glu-86.	Pro-2 to Thr-9.			Lys-29 to Thr-40,		Gln-67 to Arg-80,	Ser-85 to Asp-92.		Ser-21 to Lys-29, Gln-31 to His-37.		Gly-14 to Arg-21, Gln-31 to Gln-37.	Ser-16 to Asp-27, Arg-37 to Gly-44.	Thr-24 to Thr-29,	Thr-42 to Lys-47, Ala-52 to Asn-64.	Pro-46 to Gly-53.
17550	17551	17552		17553			17551	1/334	17555					17556	17557	17558	17559				17560	17561	17562	17563	17564	17565		17566
189 - 356	90 - 377	118 - 414		2 - 988			210 640	319 - 540	375 - 647					104 - 247	120 - 323	295 - 444	137 - 418				102 - 233	3 - 431	118 - 300	305 - 439	212 - 460	37 - 282		45 - 242
7798	66LL	7800		7801			2002	/802	7803					7804	7805	9082	7807				7808	7809	7810	7811	7812	7813		7814
974368	860306	860307		942758			07470	9/4300	918622					952210	922036	974364	834922				974581	934309	966117	778921	860357	796414		708121
HNGKS34	HNGKQ80	HNGKO32		HNGKM74			140141	HINGINE 74	HNGKJ02					HNGKH07	HNGKG03	HNGKD49	HNGKC69				HNGKC21	HNGKC06	HNGKA11	HNGJV82	HNGJR05	HNGJQ96		HNGJQ36

S0052: 1	L0771: 8, L0591: 2, L0788:	1 and S0052: 1.	S0052: 1	S0052: 1 and L0758: 1.	S0052: 1	S0052: 1		S0052: 1	AR061: 4, AR089: 1	S0052: 1		-			S0052: 1	S0052: 1 and L0758: 1.		S0052: 1			S0052: 1	S0052: 1	AR051: 86, AR050: 64,	AR054: 54 S0052: 1	S0052: 1 and L0747: 1.						L0748: 5, S0052: 1 and L0749: 1.
	Arg-31 to Ser-37,	Fro-39 to Fro-45.	Ser-19 to Leu-26, Leu-30 to Gln-35.		Thr-26 to Gly-31.	Ala-6 to Gly-11,	Phe-21 to Leu-28, Cys-45 to Ile-53.	Gly-34 to Phe-41.	His-1 to Phe-14,	Gln-18 to Arg-24,	Ser-44 to His-49,	Phe-121 to Asp-131,	Ser-149 to 1 hr-1 /4.				Pro-39 to Cys-52.	Tyr-17 to Lys-22,	Gly-46 to 1 nr-54.	Lys-6 to Leu-12.	Pro-40 to Glu-50.				Trp-1 to Arg-8,	Gln-14 to Thr-21,	Ser-39 to Gly-51,	Arg-65 to Gln-72,	Ser-80 to Glu-85,	His-90 to Gly-96.	His-7 to Gly-22, His-62 to Asn-71.
17567	17568		17569	17570	17571	17572		17573	17574				10404	17404	17575	17576	19405	17577		19406	17578	17579	17580		17581						17582
26 - 103	3 - 404		22 - 147	2 - 181	138 - 380	2 - 385		3 - 164	90 - 662				160 251	102 - 601	393 - 253	630 - 109	95 - 379	634 - 467		463 - 296	392 - 547	392 - 529	103 - 348		96 - 425						3 - 302
7815	7816		7817	7818	7819	7820		7821	7822				0,450	2007	7823	7824	9653	7825		9654	7826	7827	7828		7829						7830
959511	720363	,	746615	839947	711219	711211		615285	942946				051158	001100	422897	495689	860403	998009		860413	973790	973797	888447		099569						723004
HNGJQ08	HNGJL47		HNGJK64	HNGJK63	HNGJK40	HNGJI40		HNGJI04	HNGJG75					2010101	HNGJG35	HNGJE38		HNGJE23			HNGJE08	HNGJE01	HNGJC68		HNGJC29						HNGJB49

																										178640, 216900						
											-														!	2p11.2					- Address	
AR051: 25, AR050: 16, AR054: 1	S0052: 1	L0748: 2 and S0052: 1.	S0052: 1	S0052: 1 and L0439: 1.	S0052: 1 and L0740: 1.	L0769: 1 and S0052: 1.	L0769: 3 and S0052: 1.	S0052: 1				S0052: 1					S0052: 1 and L0589: 1.	S0052: 1	S0052: 1		S0052: 1 and L0756: 1.	S0052: 1	L0747: 2 and S0052: 1.	S0052: 1		S0052: 1				L0527: 1 and S0052: 1.	L0752: 2 and S0052: 1.	S0052: 1
Thr-17 to Leu-26, Glv-47 to Glv-53.		His-30 to Gln-37.	Ser-46 to Lys-56.		Ser-66 to Ser-73.	Ser-15 to Lys-24.	Pro-7 to Phe-12.	Asp-6 to Ser-20,	Arg-46 to Phe-53,	Pro-60 to Leu-67.		Ala-1 to Cys-7,	Gln-21 to Gly-40,	Pro-49 to Gly-54,	Ser-72 to Trp-91.		His-15 to Met-25.			Ala-15 to Arg-22.		Pro-15 to Arg-22.		Ile-3 to Trp-14,	Glu-54 to Asn-65.	Gly-1 to Glu-8,	Thr-37 to Arg-47,	Pro-57 to Arg-62,	Pro-78 to Thr-83.	Ala-1 to Thr-6.	Thr-9 to Cys-14, Lys-38 to Arg-45.	Asp-25 to Gly-32.
17583		17584	17585	17586	17587	17588	17589	17590			19407	17591				19408	17592	17593	17594	19409	17595	17596	17597	17598		17599				17600	17601	17602
95 - 256		3 - 293	1 - 198	1 - 540	373 - 621	327 - 542	317 - 496	112 - 324			586 - 365	487 - 176				308 - 658	247 - 450	210 - 476	231 - 401	396 - 280	207 - 422	123 - 326	50 - 340	174 - 368		1 - 249	-			76 - 306	178 - 348	245 - 424
7831	!	7832	7833	7834	7835	7836	7837	7838			9655	7839				9656	7840	7841	7842	2596	7843	7844	7845	7846		7847				7848	7849	7850
888461		760398	717698	792748	757216	920221	964715	772866			773431	495771				860506	720374	860515	487439	927636	727196	793171	781970	812699		725003				860525	890898	973977
HNGJA75		HNGIX71	HNGIW45	HNGIS92	HNGIS70	HNGIS02	HNGIR10	HNGIQ78				HNGIQ71					HNGIP47	HNGIP27	HNGI064		HNGI052	HNGIL94	HNGIL84	HNGIL82		HNGIL51				HNGIL22	HNGIJ51	HNGHY44

S0052: 1	80052: 1	S0052: 1	S0052: 1 and L0758: 1.	S0052: 1 and L0366: 1.	S0052: 1	S0052: 1	S0052: 1 and L0748: 1.	L0743: 2 and S0052: 1.	S0052: 1	AR050: 136, AR054: 117,	AR051: 105	S0052: 1	S0052: 1	S0052: 1 and L0754: 1.	S0052: 1			AR050: 19, AR051: 15,	AR054: 8 S0052: 1			S0052: 1	L0747: 3, L0803: 2, L0659:	2, L0666: 2, L0662: 1,	L0546: 1, S0052: 1, L0750:	1, L0779: 1, L0752: 1 and L0758: 1.	S0052: 1 and L0747: 1.
Asn-1 to His-10, Pro-53 to Ala-72.	Pro-4 to His-18, Pro-28 to Arg-39, Gln-53 to Glv-58.		Gln-1 to Asp-9, Asp-19 to Gly-25, His-58 to Ala-65	His-1 to Met-8.						Tyr-21 to Tyr-26,	His-36 to Lys-44,	Leu-70 to Gly-76.	Thr-1 to His-11.		Ala-1 to Ala-10,	Pro-12 to Ser-19,	Asp-31 to Gly-44, Pro-49 to Arg-66.	Asn-13 to Ala-19.					Gly-2 to Phe-8,	Pro-17 to Asn-22,	Met-56 to Gly-62.		
17603	17604	17605	17606	17607	17608	17609	17610	17611	17612	17613			17614	17615	17616			17617		19410	19411	17618	17619				17620
1-219	39 - 236	291 - 476	1 - 204	3 - 248	246 - 1	212 - 430	44 - 193	1 - 360	91 - 186	828 - 487			247 - 426	16 - 156	2 - 199			202 - 468		34 - 144	529 - 413	394 - 630	472 - 663				212 - 319
7851	7852	7853	7854	7855	7856	7857	7858	7859	0982	7861			7862	7863	7864			7865		9658	9659	9982	1867				7868
793271	576221	860541	916757	860554	576315	920377	959649	576251	578450	765644			895098	738213	703315	•		506492		578679	278680	569809	702584				920480
HNGH094	HNGHM61	HNGHL46	HNGHJ01	HNGHG39	HNGHD68	HNGGV02	HNGGT08	HNGGP91	HNGGP55	HNGGL74			HNGGF86	HNGGB58	HNGGB28			HNGFX89				HNGFX75	HNGFU33				HNGFT02

																															-	
														•			-															
S0052: 1, L0439: 1 and L0754: 1.	S0052: 1				-		AR051: 41, AR050: 40,	AR054: 33	S0052: 1	S0052: 1 and L0748: 1.			L0518: 1 and S0052: 1.			L0517: 1 and S0052: 1.		S0052: 1 and L0594: 1.			L0748: 2 and S0052: 1.	AR050: 17, AR054: 1	80052: 1						L0747: 3, L0589: 2 and	80052: 1.	S0052: 1	
Leu-41 to Glu-52.	Gly-1 to Asp-7, Ala-17 to Gly-22.	Thr-3 to Ala-33,	Ala-44 to Cys-49,	Phe-64 to Trp-71,	Ala-84 to Arg-89,	Ala-94 to Ser-101.	Ser-10 to Asn-17,	Gly-32 to Lys-44.		Leu-11 to Glu-19,	Gly-27 to Ala-36,	Ser-45 to Ser-59.	Thr-2 to Trp-9,	Val-33 to Leu-38,	Gly-43 to Cys-51.	Glu-63 to Ser-68,	Asp-75 to Pro-82.	Gln-11 to Gln-16,	Ser-24 to Arg-29,	Ser-39 to Gly-45.		Lys-30 to Met-35,	Pro-49 to Gly-56,	His-72 to Ser-77,	Ala-82 to Gly-92.	Lys-30 to Met-35,	Pro-49 to Gly-56.	Lys-1 to Leu-12.			Ala-3 to Thr-11,	Ala-33 to His-43, Gly-67 to Leu-74,
17621	17622	19412					17623			17624			17625			17626		17627			17628	17629				19413		19414	17630		17631	
2 - 421	439 - 621	140 - 442					3 - 191			345 - 635			1 - 309			1 - 285		45 - 317			1 - 201	2582 - 2280				227 - 649		2 - 79	800 - 1042		1 - 342	
7869	7870	0996					7871			7872			7873			7874		7875			7876	7877				9661		9662	7878		7879	
935821	842276	889744		_			872950			664280			703419			967304		990682			738240	823363				824134		854048	650896		941480	
HNGFR06	HNGFP92						HNGFN70			HNGFM17	_		HNGFK34			HNGFI11		HNGFH90			HNGFH58	HNGFH30							HNGFG10		HNGFF50	